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April 1983

Transport Properties of Oxygen

H. M. Roder

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NBSIR 82-1672

1983

Transport Properties of Oxygen

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National Bureau of Standards
Boulder, Colorado

Prepared for NASA Lewis Research Center

NASA
National Aeronautics
and Space Administration

Scientific and Technical Information Branch

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TRANSPORT PROPERTIES OF OXYGEN

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1. Introduction

An accurate thermophysical properties base for fluid oxygen has been developed through a series of measurements and analyses. Table 1 presents a chronology of prior publications which contain equations of state, correlations of the transport properties, data tables for the transport properties, or a combination of these items. Table 1 shows that the massive set of tables for oxygen in NASA SP 3071 [2] has gradually been extended and superseded by new measurements and new correlations. Specifically there have been new experimental measurements of viscosity [4], a new correlation of viscosity and thermal conductivity [3], an extension of the PVT measurements from 34 MPa (5000 psia) to 80 MPa (12000 psia) [5], a new equation of state which includes the extension in pressure [6], the development of an interactive package for the equation of state [7], new experimental thermal conductivity measurements [8], and new experimental thermal diffusivity measurements near the critical point [9]. The present tables were computed because previous tables of the transport properties of oxygen extend to only 34 MPa (5000 psia), and because for thermal conductivity the new measurements [8,9] show the previously best correlation [3] to be in error by up to 35 percent for nearly all temperatures at the highest pressures.

Table 1. Overview of Previous Publications

Reference	Year	PVT		Transport Properties		Notes
		Equation	Data Tables	Equations	Data Tables	
[1] NBS Tech. Note 384	1971	polynomial	isobars to 5000 psia	yes	yes	temperature range triple point to 340 K
[2] NASA SP 3071	1972	polynomial	isobars to 340 atm and 5000 psia	ref. 1	yes	
[3] J. Phys. Chem. Ref. Data	1974	mod. BWR	no	new	yes	new correlation of transport properties uses the data of [4]
[4] Physica	1977	ref. 3	no	ref. 3	no	new viscosity measurements
[5] NASA RP 1011	1977	polynomial	isobars to 1000 bar and 15000 psia	no	no	incorporates new PVT data to 800 bar
[6] NBS IR 78-882	1978	mod. BWR	no	ref. 3	no	incorporates revised transport property correlations.
[7] NBS Tech. Note 1025	1980	mod. BWR	no	ref. 3	no	incorporates BWR into "Fluids Pack"
[8] J. Res. NBS (in press)	1982	ref. 7	no	new	no	new thermal conductivity measurements
[9] Int. J. Thermophysics (in press)	1982	poly. and mod. BWR	no	no	no	new thermal diffusivity measurements
present report	1982	mod. BWR	isobars to 100 MPa and 15000 psia	ref. 3 and new	yes	incorporates new thermal conductivity data

V. 3 #2 1982, p117.

2. Representation of the Viscosity

Values of the viscosity are calculated from the correlation of Hanley, et al. [3]. For the correlation the authors surveyed the literature and systematically selected data which met particular criteria for accuracy. For oxygen the experimental measurements of Haynes [4] with an accuracy of 2 percent were selected. This set of data was measured with a torsionally oscillating quartz crystal, and it comprises some 200 points at temperatures from 75 to 300 K with pressures to 34 MPa. The correlation expresses viscosity in terms of density and temperature, and it requires an equation of state (EOS) to translate pressures into equivalent densities. The EOS most commonly used is the interactive package by McCarty [7]. The dependence of viscosity on temperature and density is expressed in [3] as

$$\eta(\rho,T) = \eta_0(T) + \eta_1(T)\rho + \Delta\eta(\rho,T) + \Delta\eta_c(\rho,T) \quad , \tag{1}$$

where

$$\eta_0 = g_1 T^{-1} + g_2 T^{-2/3} + g_3 T^{-1/3} + g_4 + g_5 T^{1/3} + g_6 T^{2/3} + g_7 T + g_8 T^{4/3} + g_9 T^{5/3} \quad , \tag{2}$$

and

$$\eta_1(T) = A + B\,[C - \ell n(T/F)]^2 \quad , \tag{3}$$

and

$$\Delta\eta(\rho,T) = D \exp[k_1 + k_2/T] \left\{ \exp[\rho^{0.1}(k_3 + k_4/T^{3/2}) + \theta\rho^{0.5}(k_5 + k_6/T + k_7/T^2)] - 1.0 \right\} \quad , \tag{4}$$

where θ is a density dependent factor given by $\theta = (\rho - \rho_c)/\rho_c$.

While there is evidence for an enhancement of viscosity near the critical point, term 4 in eq (1), $\Delta\eta_c(\rho,T)$, is not considered in reference [3].* Program listings to calculate the viscosity [7] are given in appendix A. For completeness the values of the coefficients for eqs (2-4) are listed below. For these

---

* A full description of how to calculate $\Delta\eta_c(\rho,T)$ is given in reference [10].

coefficients the units implied are temperature in K, density in g/cm^3, and viscosity in μg/cm•s.

Equation (2)		Equation (3)		Equation (4)	
g_1	= -9.7076378593E+1	A	= 4.352652	D	= 1.0 μg/cm s
g_2	= 8.2801254201E+1	B	= - 2.036126	k_1	= -12.15239
g_3	= -2.4668758803E+1	C	= 1.4	k_2	= 2.434069 x 10^2
g_4	= 2.1324360243	F	= 100.0	k_3	= 18.20116
g_5	= 3.7851049522E-1			k_4	= - 2.749896 x 10^3
g_6	= -1.0487216090E-1			k_5	= - 0.3142173
g_7	= 1.1134441304E-2			k_6	= 1.191150 x 10^2
g_8	= -5.3676093757E-4			k_7	= 2.739043 x 10^2
g_9	= 1.0279379641E-5			ρ_c	= 0.435 g/cm^3

3. Representation of the Thermal Conductivity

Values of the thermal conductivity are calculated from the correlation of Roder [8]. This new correlation is based on new experimental measurements of the thermal conductivity [8] and new experimental measurements of the thermal diffusivity [9]. The new conductivity values [8] comprise 1126 points measured on 13 isotherms from 78 to 310 K with pressures to 70 MPa. The measurements were made with a new transient hot wire apparatus.

The new correlation expresses thermal conductivity as a function of density and temperature rather than temperature and pressure because over a wide range of experimental conditions the behavior of thermal conductivity is dominated by its density dependence. The technique requires an equation of state [7] to translate measured pressures into equivalent densities. The dependence of thermal conductivity on temperature and density is normally expressed as

$$\lambda(\rho,T) = \lambda_o(T) + \lambda_{excess}(\rho,T) + \Delta\lambda_{critical}(\rho,T) \qquad (5)$$

The first term on the right of eq (1) is the dilute gas term which is independent of density. The second is the excess thermal conductivity. The first two terms taken together are sometimes called the "background" thermal conductivity. The final term is the critical point enhancement. The dilute gas term is expressed as

$$\lambda_o(T) = [A_1T^{-1} + A_2T^{-2/3} + A_3T^{-1/3} + A_4 + A_5T^{1/3} + A_6T^{2/3} + A_7T + A_8T^{4/3} + A_9T^{5/3}]/1000 \quad . \tag{6}$$

with λ_o in W/m•K and T in kelvin.

The expression used for the excess thermal conductivity is as follows:

$$\lambda_{excess}(\rho,T) = \alpha\rho + \delta[e^{\beta\rho^{\gamma}} - 1.0] \tag{7}$$

where the parameters α, β, γ, δ are functions of temperature as follows:

$$\alpha = B_1T \qquad \gamma = B_5 + B_6T + B_7T^2$$
$$\beta = B_2 + B_3T + B_4T^2 \qquad \delta = B_8 + B_9T + B_{10}/T^2 \quad . \tag{8}$$

The coefficients for eqs (6) and (7) with T in kelvins and λ in W/m•K are

Equation (6)		Equation (7)	
A_1	= -2.0395052193E+5	B_1	= .298644E-5
A_2	= 2.4088141709E+5	B_2	= .59842E+00
A_3	= -1.2014175183E+5	B_3	= .11362E-01
A_4	= 3.295494919E+4	B_4	= -.19520E-04
A_5	= -5.4244239598E+3	B_5	= .47624E+00
A_6	= 5.4734865540E+2	B_6	= -.64769E-03
A_7	= -3.2854821539E+1	B_7	= .83223E-06
A_8	= 1.0753572103	B_8	= -.278141E-4
A_9	= -1.4610986820E-2	B_9	= .153705E-6
		B_{10}	= .147176E+1

The calculation of the third term in eq (5) is split into two separate regions which are shown in figure 1. The first region is called the critical region proper, and it corresponds roughly to the range of conditions for which Sengers, et al. [10] recommend the use of a scaled equation of state. The second region is called the extended critical region. It is shown as a triangle in figure 1

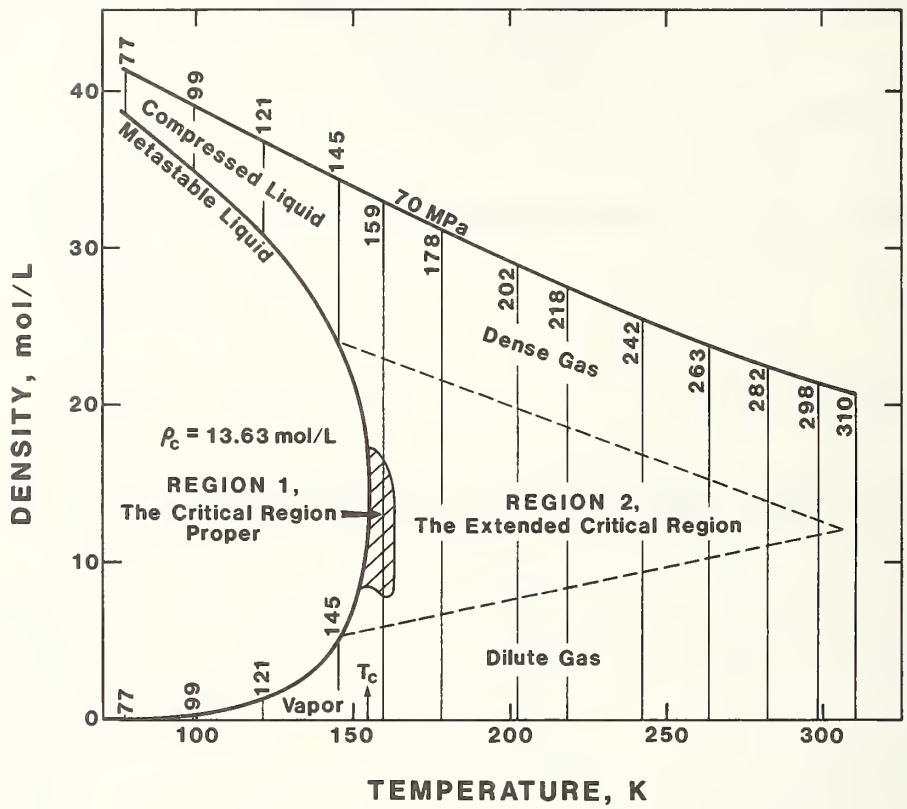

Figure 1. Region of the PVT surface covered by the new thermal conductivity measurements [8]. Also shown are regions 1 and 2 for the calculation of the critical point enhancement. The new thermal diffusivity measurements [9] are nearly all located in region 1.

and covers those densities and temperatures for which the new measurements [8] reveal an anomalous increase above the background conductivity.

3.1. Calculations for Region 1

We define the reduced variables $T^* = T/T_c$, $\rho^* = \rho/\rho_c$, $P^* = P/P_c$ and

$$\Delta T^* = (T - T_c)/T_c \quad \text{and} \quad \Delta\rho^* = (\rho - \rho_c)/\rho_c \tag{9}$$

The scaling variables are defined by

$$x = \Delta T^*/|\Delta\rho^*|^{1/\beta} \quad \text{and} \quad y = \frac{x + x_0}{x_0} \tag{10}$$

The symmetrized compressibility is defined by

$$X_T^* = |\Delta\rho^*|^{-\gamma/\beta}\left[\frac{[(1 + E)/(1 + Ey^{2\beta})]^{(\gamma - 1)/2\beta}}{D[\delta + (y - 1)(\delta - \beta^{-1} + Ey^{2\beta})/(1 + Ey^{2\beta})]}\right] \tag{11}$$

for which a special case occurs at the critical isochore where $\Delta\rho^* = 0$

$$X_T^* = \Gamma|\Delta T^*|^{-\gamma} \quad . \tag{12}$$

The coefficient Γ in eq (12) is defined by

$$\Gamma = \frac{x_0^\gamma}{D}\left(\frac{1 + E}{E}\right)^{(\gamma - 1)/2\beta} \quad . \tag{13}$$

Given the definitions above, Sengers, et al. [10] estimate the critical enhancement from

$$\Delta\lambda_{\text{critical}}(\rho,T) = \frac{\Lambda}{\Xi_0}\frac{k_B P_c}{6\pi\eta}\left(\frac{T^*}{\rho^*}\right)^2\left(\frac{\partial P^*}{\partial T^*}\right)_{\rho^*}^2 X_T^{*(\gamma-\nu)/\gamma}\,\rho^{*n}\exp\left[-\left\{A_\lambda(\Delta T^*)^2 + B_\lambda(\Delta\rho^*)^4\right\}\right] \quad . \tag{14}$$

This equation relates the thermal conductivity enhancement at a given temperature and density to the pressure coefficient $(\partial P/\partial T)_\rho$, the symmetrized compressibility X_T and the (normal) shear viscosity η.

The values to be used with eqs (9-14) for oxygen are

T_c = 154.581 K	n = 0	β = 0.355
ρ_c = 13.63 mol/L	Λ = 1.04	γ = 1.190
P_c = 49.77054 atm	A_λ = 39.8	δ = 4.352
k_B = 1.38054 * 10^{-23} J/K	B_λ = 5.45	D = 2.36
	Ξ = 5.9783 x 10^{-10}	E = 0.287
		X_0 = 0.183

The prescription given by Sengers, et al. [10] has been modified in two minor ways. First, the value of Λ adopted to be 1.02 for CO_2 in [10] is chosen to be 1.04 for oxygen. This number is established as a best value for Weber's new experimental diffusivity measurements [9], see section 4. The second modification is to extend the calculation using the scaled equation out to a temperature of 162.9805 K or 1.054 T_c rather than 1.03 T_c.

3.2. Calculations for Region 2

The expressions used in this region are as follows [8].

$$\Delta\lambda_{critical}(\rho,T) = \left\{ C_1/(T + C_2) + C_3 + C_4 T \right\} \cdot e^{-x^2} \qquad (15)$$

we define

$$\rho_{center} = \rho_c + C_5(T - T_c)^{1.5} \quad , \qquad (16)$$

then the variable x in eq (15) is

$$x = C_6(\rho - \rho_{center}) \quad \text{for} \quad \rho > \rho_{center} \quad , \qquad (17)$$

and

$$x = C_6(\rho - \rho_{center}) + C_7(\rho - \rho_{center})^5 \quad \text{for} \quad \rho < \rho_{center} \quad . \qquad (18)$$

The coefficients for eqs (15-18) are

T_c = 154.581 K		C_4 = - .282950E-04
ρ_c = 13.63 mol/L		C_5 = - .71599E-3
C_1 = .219200E+0		C_6 = .13804E+0
C_2 = -145.55		C_7 = .12980E-5
C_3 = .734512E-02		

3.3. Boundaries for Regions 1 and 2

The four boundaries defining the two different regions of computation are the saturated liquid and vapor at the lower temperature, 162.9805 K at the upper temperature, densities between 8.5 and 7.5 mol/L at the lower density, and densities between 18 and 13.6 mol/L at the upper density. The boundaries are shown in ρ-T coordinates in figure 1. For any given temperature between saturation and 162.9805 K the switch between regions 1 and 2 is accomplished without an abrupt change in the value of λ. This is done by switching at those densities where the calculated values of thermal conductivity from [8] and [10] are equal.

The switch in calculation at the upper temperature boundary of 162.9805 K can not, unfortunately, be accomplished without an abrupt change in the value of thermal conductivity. The reason for this is because in reference [10] the centering density is ρ_c by definition, whereas in reference [8] the centering density is less than ρ_c for all temperatures other than T_c. The maximum "glitch" along the 162.9805 K boundary is about 1.6 percent in the value of λ. The local change across this boundary is shown for densities from 0 to 30 mol/L in table 2.

Programs to calculate the thermal conductivity are new. Listings are given in appendix B. The changes required in the program set of reference [7] to implement the new thermal conductivity calculation are indicated in appendix B by arrows.

4. Representation of the Thermal Diffusivity

The thermal diffusivity is defined by

$$\alpha \equiv \lambda/\rho\, C_p \qquad (19)$$

where C_p is the heat capacity at constant pressure. Both ρ and C_p are normally obtained from an equation of state and the thermal diffusivity is then calculated from the thermal conductivity. Occasionally the thermal diffusivity is measured directly, as was done by Weber [9] who used a light scattering apparatus to measure the thermal diffusivity, primarily in the critical region.

The experimental information to be considered are the 76 points presented in three groups in table 3, where the values are taken from reference [9]. Weber converted his experimental measurements of thermal diffusivity to values of

Table 2. Thermal Conductivities near 162.9805 K

Temperatures inside K	Temperatures outside K	Density mol/L	Thermal Conductivities inside W/m.K	Thermal Conductivities outside W/m.K	Deviations in.-out. W/m.K	Deviations percent
162.980	162.981	.5	.015578	.015579	-.000000	-.00
162.980	162.981	1.0	.016030	.016030	-.000000	-.00
162.980	162.981	1.5	.016539	.016539	-.000000	-.00
162.980	162.981	2.0	.017123	.017123	-.000000	-.00
162.980	162.981	2.5	.017795	.017795	-.000000	-.00
162.980	162.981	3.0	.018564	.018564	-.000000	-.00
162.980	162.981	3.5	.019436	.019436	-.000000	-.00
162.980	162.981	4.0	.020412	.020412	-.000000	-.00
162.980	162.981	4.5	.021491	.021491	.000000	.00
162.980	162.981	5.0	.022668	.022668	.000000	.00
162.980	162.981	5.5	.023938	.023938	.000000	.00
162.980	162.981	6.0	.025294	.025294	.000000	.00
162.980	162.981	6.5	.026728	.026728	.000000	.00
162.980	162.981	7.0	.028231	.028231	.000000	.00
162.980	162.981	7.5	.029792	.029792	.000000	.00
162.980	162.981	8.0	.031402	.031401	.000000	.00
162.980	162.981	8.5	.033214	.033046	.000168	.50
162.980	162.981	9.0	.035034	.034713	.000321	.92
162.980	162.981	9.5	.036831	.036386	.000445	1.21
162.980	162.981	10.0	.038586	.038051	.000535	1.39
162.980	162.981	10.5	.040280	.039692	.000588	1.46
162.980	162.981	11.0	.041894	.041292	.000602	1.44
162.980	162.981	11.5	.043411	.042836	.000575	1.32
162.980	162.981	12.0	.044813	.044310	.000503	1.12
162.980	162.981	12.5	.046087	.045703	.000384	.83
162.980	162.981	13.0	.047229	.047005	.000224	.47
162.980	162.981	13.5	.048258	.048213	.000045	.09
162.980	162.981	14.0	.049325	.049324	.000001	.00
162.980	162.981	14.5	.050342	.050342	.000001	.00
162.980	162.981	15.0	.051274	.051274	.000001	.00
162.980	162.981	15.5	.052131	.052131	.000001	.00
162.980	162.981	16.0	.052928	.052928	.000001	.00
162.980	162.981	16.5	.053682	.053681	.000001	.00
162.980	162.981	17.0	.054413	.054412	.000000	.00
162.980	162.981	17.5	.055141	.055141	.000000	.00
162.980	162.981	18.0	.055890	.055889	.000000	.00
162.980	162.981	18.5	.056680	.056680	.000000	.00
162.980	162.981	19.0	.057533	.057533	.000000	.00
162.980	162.981	19.5	.058468	.058468	.000000	.00
162.980	162.981	20.0	.059504	.059504	.000000	.00
162.980	162.981	20.5	.060656	.060656	.000000	.00
162.980	162.981	21.0	.061937	.061937	.000000	.00
162.980	162.981	21.5	.063358	.063358	.000000	.00
162.980	162.981	22.0	.064927	.064927	.000000	.00
162.980	162.981	22.5	.066651	.066651	.000000	.00
162.980	162.981	23.0	.068533	.068533	.000000	.00
162.980	162.981	23.5	.070576	.070576	-.000000	-.00
162.980	162.981	24.0	.072780	.072780	-.000000	-.00
162.980	162.981	24.5	.075145	.075145	-.000000	-.00
162.980	162.981	25.0	.077671	.077671	-.000000	-.00
162.980	162.981	25.5	.080354	.080354	-.000000	-.00
162.980	162.981	26.0	.083195	.083195	-.000000	-.00
162.980	162.981	26.5	.086190	.086190	-.000000	-.00
162.980	162.981	27.0	.089339	.089340	-.000000	-.00
162.980	162.981	27.5	.092641	.092641	-.000000	-.00
162.980	162.981	28.0	.096095	.096095	-.000000	-.00
162.980	162.981	28.5	.099700	.099700	-.000000	-.00
162.980	162.981	29.0	.103458	.103458	-.000000	-.00
162.980	162.981	29.5	.107369	.107369	-.000000	-.00
162.980	162.981	30.0	.111436	.111436	-.000000	-.00

thermal conductivity using eq (19). Thus the comparisons to be made are "experimental thermal conductivity" to calculated thermal conductivity, where the method of calculation has been described in the previous section. In table 3 the first group, 14 points, includes all of Weber's measurements with temperatures greater than 158. K, i.e., these points represent an overlap of the experimental measurements of references [8] and [9]. The second group, 33 points, includes those measurements for which the experimental densities lie between 13.1 and 13.7 mol/L, or $|\Delta\rho^*| \leq 0.04$. In essence this group is quite close to critical density. The remaining 29 points, i.e., the last group, are characterized by experimental densities which are considerably different than critical density. Differences between the calculation and Weber's "thermal conductivity" values [9] are given in table 3. The RMS deviation for the first grouping of 14 points is 5.3 percent. Well within the experimental uncertainty estimated by Weber, this average deviation indicates agreement between the diffusivity experiment and the hot wire thermal conductivity measurements. For the second grouping of 33 points we find an RMS deviation of 7.5 percent, again within the expected uncertainty of the experimental measurements. This average deviation indicates agreement between the diffusivity measurements and the most current method of predicting the anomalous thermal conductivity in the critical region for densities close to critical, i.e., for $\Delta\lambda_c(\rho_c,T)$. However, the deviation of the third grouping of 29 points is nearly 27 percent RMS, which exceeds experimental uncertainty by a considerable margin, and indicates a basic disagreement between these measurements and the prediction for densities which are substantially different from critical density. Despite considerable effort, the cause of the disagreement remains unresolved. The calculation values off the critical isochore may, therefore, be uncertain by as much as 30 percent for both thermal diffusivity and thermal conductivity.

5. Prandtl Number

The Prandtl number, Pr, is defined by the relation

$$Pr \equiv C_p \eta/\lambda \qquad (20)$$

where C_p is the specific heat at constant pressure, η the viscosity and λ the thermal conductivity. To conserve space the Prandtl number has not been presented in the tables, it is however quite easy to calculate the Prandtl number

Table 3. Thermal Conductivities from Lightscattering, Weber [9].

Temperature	Density	Thermal Conductivity exp.	calc.	Deviations exp.-calc.		Group RMS
K	mol/L	W/m.K	W/m.K	W/m.K	percent	percent
158.519	13.19	.0556	.0562	-.0006	-1.16	
161.847	13.14	.0480	.0490	-.0010	-2.08	
164.426	13.27	.0482	.0468	.0014	2.82	
164.426	13.27	.0470	.0468	.0002	.34	
164.426	13.27	.0444	.0468	-.0024	-5.50	
166.796	13.08	.0415	.0453	-.0038	-9.15	
168.946	13.21	.0440	.0449	-.0009	-1.94	
173.935	13.04	.0414	.0433	-.0019	-4.49	
159.583	13.49	.0541	.0538	.0003	.57	
159.890	13.44	.0525	.0530	-.0005	-.98	
159.883	13.58	.0537	.0533	.0004	.80	
159.878	13.50	.0527	.0531	-.0004	-.84	
158.133	15.30	.0693	.0589	.0104	15.03	
160.493	15.30	.0550	.0542	.0008	1.44	
						5.23
154.619	13.13	.2507	.2855	-.0348	-13.90	
155.173	13.18	.1043	.0996	.0047	4.51	
155.649	13.19	.0875	.0812	.0063	7.16	
155.651	13.20	.0871	.0812	.0059	6.74	
156.642	13.19	.0715	.0665	.0050	7.03	
157.580	13.18	.0627	.0601	.0026	4.12	
154.717	13.33	.1842	.1835	.0007	.35	
154.746	13.37	.1758	.1697	.0061	3.47	
154.771	13.40	.1674	.1600	.0074	4.40	
154.787	13.38	.1601	.1543	.0058	3.64	
154.795	13.39	.1578	.1520	.0058	3.68	
154.645	13.42	.2610	.2635	-.0025	-.95	
154.690	13.44	.2109	.2063	.0046	2.17	
154.801	13.44	.1627	.1507	.0120	7.36	
154.841	13.46	.1567	.1404	.0163	10.37	
154.872	13.43	.1426	.1337	.0089	6.21	
155.025	13.47	.1212	.1129	.0083	6.88	
155.034	13.53	.1230	.1121	.0109	8.87	
155.271	13.56	.1100	.0956	.0144	13.09	
155.524	13.54	.0990	.0856	.0134	13.52	
155.546	13.57	.0970	.0850	.0120	12.40	
155.769	13.57	.0891	.0793	.0098	10.98	
156.003	13.58	.0855	.0749	.0106	12.35	
156.509	13.58	.0783	.0685	.0098	12.56	
157.000	13.58	.0731	.0643	.0088	12.03	
157.468	13.58	.0643	.0614	.0029	4.49	
154.595	13.63	.5600	.5831	-.0231	-4.12	
154.598	13.63	.5180	.5266	-.0086	-1.66	
154.599	13.63	.5230	.5111	.0119	2.27	
154.603	13.63	.4720	.4605	.0115	2.44	
154.617	13.63	.3550	.3578	-.0028	-.79	
154.628	13.63	.3170	.3129	.0041	1.29	
154.678	13.63	.2250	.2198	.0052	2.30	
						7.61
154.579	12.98	.7700	.4065	.3635	47.21	
154.560	12.51	.2825	.1839	.0986	34.89	
154.542	12.26	.2152	.1432	.0720	33.47	
154.497	11.87	.1524	.1057	.0467	30.61	
154.449	11.57	.1256	.0893	.0363	28.93	
154.410	11.38	.1206	.0813	.0393	32.62	
154.388	11.29	.1058	.0779	.0279	26.41	
154.361	11.18	.1134	.0744	.0390	34.44	
154.267	10.86	.0906	.0659	.0247	27.31	
154.169	10.59	.0687	.0602	.0085	12.40	
154.131	10.49	.0870	.0585	.0285	32.78	
154.007	10.22	.0723	.0541	.0182	25.22	
154.000	10.21	.0707	.0538	.0169	23.83	
153.792	9.83	.0565	.0489	.0076	13.54	
153.574	9.49	.0517	.0452	.0065	12.56	
153.338	9.18	.0476	.0423	.0053	11.21	
152.860	8.66	.0405	.0380	.0025	6.14	
152.842	8.65	.0457	.0379	.0078	17.11	
154.808	15.28	.1295	.0974	.0321	24.76	
155.046	15.29	.1110	.0861	.0249	22.43	
155.143	15.29	.1213	.0832	.0381	31.44	
155.280	15.30	.1029	.0797	.0232	22.53	
155.514	15.30	.0950	.0754	.0196	20.66	
155.737	15.29	.0844	.0724	.0120	14.21	
155.740	15.30	.0978	.0723	.0255	26.07	
155.752	15.30	.0922	.0721	.0201	21.76	
156.221	15.31	.0851	.0676	.0175	20.55	
154.579	14.29	.6580	.3889	.2691	40.89	
154.409	15.90	.1265	.0828	.0437	34.57	
						26.88

from the variables tabulated. If we solve eq (19) for C_p and substitute into eq (20) the relation for the Prandtl number becomes

$$Pr = \frac{\eta}{\rho\alpha} \quad . \tag{21}$$

As an example we use eq (21) to determine Pr for the saturated liquid at 100 K

$$Pr = \frac{1542.3 \times 10^{-6}}{1.0907 \times 0.000723} = 1.956$$

Values for η, ρ, and α are taken from table 4. Because the viscosity is tabulated in μg/cm s rather than Pa s, no unit conversions are required, and Pr is dimensionless as expected.

6. Description of the Data Tables

The following tables of values for the transport properties are presented in this report:

Table 4. Transport properties of oxygen for saturated liquid and vapor, SI units.

Table 5. Transport properties of oxygen, isobars, SI units.

Table 6. Transport properties of oxygen for saturated liquid and vapor, Engr. units.

Table 7. Transport properties of oxygen, isobars, Engr. units.

Table entries of temperature and pressure are chosen to correspond to the values given in NASA RP 1011 [5] so that the present tables can be thought of as an augmentation or extension of the earlier ones. Slight differences in the vapor pressure and density entries may be evident; they occur because the tables of NASA RP 1011 [5] were prepared using a polynomial PVT surface, while the present tables utilize a modified Benedict-Webb-Rubin equation of state [7]. It was not possible to use the polynomial PVT surface because that program specifically excludes a portion of the PVT surface close to the critical point. Conversions to other SI units and to units normally used in applied problems are given in appendix C. The tables were calculated using the programs listed in appendices A and B. The new programs given in appendix B for the thermal conductivity were written to be compatible with the equation of state package of reference [7]. The primary variables internal to the computer programs of reference [7] are pressure in atmospheres, density in moles/liter, and temperature in

kelvins. The changes required in the program set of reference [7] to implement the new thermal conductivity calculation are listed in appendix B. The changes are minimal, and they are indicated in appendix B by arrows. Branching occurs on the value of the molecular weight. We note that the dilute gas value for thermal conductivity, FUNCTION DILV(T), ENTRY DILT of reference [7] remains unchanged. The number of digits given in tables 4-7 should not be construed to be indicative of the accuracy of a quantity. Most of the properties in the tables range in value over several orders of magnitude, making it necessary to print more digits than is needed at one end of the range. If a given property is varying very slowly it may require digits beyond those necessary for accuracy to show the direction of the change. As an extreme case consider the triple point, the first two lines in table 4. The triple point pressure is not known to be better than about two digits, yet the saturated liquid density differs by five orders of magnitude from that of the vapor.

7. Error Estimates

Viscosity: The most recent experimental measurements published for a wide range of the viscosity surface are those by Haynes [4]. These new measurements cover temperatures from 75 to 300 K with pressures to 34 MPa. The correlation [3] represents the 175 experimental points with a RMS deviation of 1 percent (1 σ) where the maximum and minimum deviations are + 3 and - 3 percent. Thus the uncertainty in viscosity for the tables presented here is approximately 1 percent for the dilute gas rising to 3 percent at pressures of 34 MPa. The uncertainty is expected to increase to no more than 10 percent for pressures up to 100 MPa.

Thermal Conductivity: The uncertainty of the dilute gas values is approximately 1 percent at room temperature and 1 atmosphere pressure, rising to 5 percent in going down to the triple point. The accuracy of the tables is expected to be 1.5 percent (1 σ) over much of the surface, as established by the fit of the correlating surface [8]. This accuracy degrades to around 6 percent at 77 K and zero density and to around 6 percent in the region covering the critical enhancement at 159 K. For temperatures closer to critical the calculated values may be in error by as much as 30 percent. Extrapolation of the thermal conductivity surface of [8] for temperatures higher than about 340 K has not been examined.

Thermal Diffusivity: The uncertainty is estimated to be 5 percent, except for the critical region. At the critical point the thermal diffusivity is

expected to go to zero, even though both thermal conductivity and specific heat at constant pressure diverge strongly. In the near critical region ($T_c \pm 3$ percent; $\rho_c \pm 30$ percent) the uncertainties are as large as 30 percent when compared to experiment.

8. Summary

This report presents tables of viscosity, thermal conductivity, and thermal diffusivity of oxygen, as a function of temperature and pressure from the triple point to 320 K with pressures to 100 MPa. Values of the viscosity are calculated from a previous correlation. Values of the thermal conductivity are calculated from a new correlation which combines new experimental measurements of the thermal conductivity and new experimental measurements of the thermal diffusivity in the critical region.

9. References

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Table 4. Transport Properties of Oxygen for saturated Liquid and Vapor, SI Units

Temp. K	Pressure MPa	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s	Temp. K	Pressure MPa	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s
54.359	.00015	1.306190	.20356	4852.3	.000937	106.	.4081	1.05815	.12814	1344.8	.000685
54.359	.00015	.000010	.00408	36.3	4.270533	106.	.4081	.01627	.00999	80.4	.005636
56.	.00024	1.299003	.20050	4677.6	.000927	108.	.4722	1.04690	.12528	1285.6	.000671
56.	.00024	.000017	.00436	38.0	2.860294	108.	.4722	.01867	.01025	82.2	.004945
58.	.00043	1.290220	.19693	4462.3	.000915	110.	.5434	1.03543	.12241	1229.4	.000657
58.	.00043	.000028	.00467	39.9	1.797919	110.	.5434	.02134	.01051	84.0	.004352
60.	.00073	1.281405	.19353	4248.2	.000905	112.	.6222	1.02371	.11951	1175.9	.000642
60.	.00073	.000047	.00495	41.8	1.161530	112.	.6222	.02428	.01078	85.8	.003840
62.	.00119	1.272552	.19026	4038.2	.000896	114.	.7090	1.01173	.11659	1124.8	.000626
62.	.00119	.000074	.00520	43.6	.770926	114.	.7090	.02753	.01106	87.7	.003395
64.	.00188	1.263654	.18710	3834.4	.000888	116.	.8043	.99946	.11365	1076.0	.000610
64.	.00188	.000113	.00543	45.4	.525087	116.	.8043	.03111	.01135	89.6	.003006
66.	.00288	1.254707	.18404	3638.3	.000879	118.	.9085	.98687	.11069	1029.4	.000593
66.	.00288	.000168	.00565	47.1	.366477	118.	.9085	.03506	.01165	91.6	.002665
68.	.00429	1.245706	.18105	3450.8	.000871	120.	1.0222	.97392	.10770	984.6	.000575
68.	.00429	.000244	.00586	48.8	.261671	120.	1.0222	.03939	.01196	93.7	.002365
70.	.00625	1.236647	.17813	3272.3	.000863	122.	1.1458	.96059	.10468	941.6	.000557
70.	.00625	.000345	.00607	50.5	.190824	122.	1.1458	.04416	.01230	95.8	.002099
72.	.00889	1.227527	.17526	3103.0	.000855	124.	1.2797	.94683	.10164	900.2	.000538
72.	.00889	.000478	.00627	52.1	.141898	124.	1.2797	.04940	.01264	98.0	.001862
74.	.01240	1.218340	.17243	2943.0	.000847	126.	1.4245	.93260	.09857	860.3	.000518
74.	.01240	.000650	.00647	53.8	.107424	126.	1.4245	.05515	.01302	100.3	.001651
76.	.01695	1.209083	.16964	2791.9	.000839	128.	1.5807	.91782	.09548	821.6	.000497
76.	.01695	.000866	.00667	55.4	.082673	128.	1.5807	.06149	.01342	102.7	.001462
78.	.02276	1.199753	.16687	2649.5	.000831	130.	1.7488	.90245	.09235	784.1	.000475
78.	.02276	.001137	.00687	57.0	.064591	130.	1.7488	.06847	.01385	105.2	.001292
80.	.03009	1.190345	.16411	2515.5	.000823	132.	1.9294	.88640	.08920	747.6	.000453
80.	.03009	.001469	.00708	58.7	.051164	132.	1.9294	.07618	.01433	107.9	.001138
82.	.03919	1.180854	.16137	2389.5	.000814	134.	2.1229	.86957	.08602	712.0	.000429
82.	.03919	.001872	.00728	60.3	.041042	134.	2.1229	.08472	.01487	110.8	.000999
84.	.05035	1.171275	.15864	2271.0	.000806	136.	2.3301	.85185	.08282	677.2	.000404
84.	.05035	.002356	.00749	61.9	.033303	136.	2.3301	.09421	.01549	113.9	.000873
86.	.06387	1.161604	.15590	2159.5	.000797	138.	2.5514	.83309	.07960	642.9	.000378
86.	.06387	.002931	.00770	63.5	.027309	138.	2.5514	.10481	.01621	117.3	.000759
88.	.08007	1.151835	.15317	2054.7	.000787	140.	2.7875	.81308	.07638	608.9	.000350
88.	.08007	.003607	.00791	65.2	.022609	140.	2.7875	.11674	.01706	121.1	.000654
90.	.09931	1.141960	.15043	1956.1	.000778	142.	3.0392	.79155	.07317	575.1	.000320
90.	.09931	.004396	.00812	66.8	.018882	142.	3.0392	.13028	.01811	125.3	.000557
92.	.12194	1.131973	.14769	1863.3	.000768	144.	3.3072	.76811	.07002	541.1	.000289
92.	.12194	.005308	.00834	68.5	.015896	144.	3.3072	.14584	.01945	130.1	.000467
94.	.14833	1.121867	.14494	1775.9	.000757	146.	3.5924	.74215	.06700	506.4	.000254
94.	.14833	.006357	.00856	70.1	.013479	146.	3.5924	.16405	.02121	135.7	.000383
96.	.17887	1.111632	.14217	1693.5	.000746	148.	3.8958	.71262	.06423	470.4	.000216
96.	.17887	.007555	.00879	71.8	.011504	148.	3.8958	.18598	.02365	142.6	.000302
98.	.21395	1.101259	.13940	1615.7	.000735	150.	4.2186	.67747	.06197	431.5	.000171
98.	.21395	.008916	.00902	73.5	.009878	150.	4.2186	.21370	.02726	151.5	.000221
100.	.25399	1.090736	.13661	1542.3	.000723	152.	4.5625	.63157	.06075	386.2	.000115
100.	.25399	.010452	.00926	75.2	.008527	152.	4.5625	.25242	.03324	164.7	.000133
102.	.29940	1.080053	.13380	1472.8	.000711	154.	4.9305	.54944	.06376	317.9	.000034
102.	.29940	.012180	.00949	76.9	.007397	154.	4.9305	.32914	.05480	193.9	.000035
104.	.35061	1.069196	.13098	1407.1	.000698	154.581	5.0430	.54944			
104.	.35061	.014115	.00974	78.6	.006444	154.581	5.0430	.32914			

Table 5. Transport Properties of Oxygen, Isobars, SI Units.

	.1 MPa Isobar					.2 MPa Isobar			
	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s
*	54.370	1.3063	.20358	4855.4	.000937	54.382	1.3063	.20361	4858.5	.000937
	56.	1.2991	.20054	4681.7	.000927	56.	1.2992	.20059	4685.8	.000927
	58.	1.2903	.19698	4466.2	.000916	58.	1.2905	.19703	4470.0	.000916
	60.	1.2815	.19358	4251.8	.000906	60.	1.2817	.19362	4255.4	.000906
	62.	1.2727	.19031	4041.6	.000896	62.	1.2728	.19036	4045.0	.000897
	64.	1.2638	.18715	3837.6	.000888	64.	1.2639	.18720	3840.9	.000888
	66.	1.2548	.18409	3641.3	.000879	66.	1.2550	.18414	3644.5	.000880
	68.	1.2458	.18110	3453.6	.000871	68.	1.2460	.18116	3456.6	.000872
	70.	1.2368	.17818	3275.0	.000863	70.	1.2369	.17824	3277.8	.000864
	72.	1.2277	.17531	3105.5	.000855	72.	1.2278	.17537	3108.2	.000856
	74.	1.2185	.17248	2945.2	.000847	74.	1.2186	.17254	2947.8	.000848
	76.	1.2092	.16969	2793.9	.000840	76.	1.2094	.16975	2796.4	.000840
	78.	1.1999	.16691	2651.4	.000831	78.	1.2001	.16698	2653.8	.000832
	80.	1.1905	.16416	2517.1	.000823	80.	1.1906	.16422	2519.5	.000823
	82.	1.1810	.16141	2390.8	.000815	82.	1.1812	.16148	2393.1	.000815
	84.	1.1714	.15867	2272.0	.000806	84.	1.1716	.15874	2274.2	.000806
	86.	1.1617	.15593	2160.3	.000797	86.	1.1619	.15600	2162.3	.000797
	88.	1.1519	.15318	2055.1	.000787	88.	1.1521	.15326	2057.1	.000788
	90.	1.1420	.15043	1956.1	.000778	90.	1.1422	.15051	1958.1	.000778
*	90.066	1.1416	.15034	1953.0	.000777	92.	1.1322	.14775	1864.8	.000768
*	90.066	.0044	.00813	66.9	.018773	94.	1.1220	.14498	1776.8	.000757
	92.	.0043	.00831	68.4	.019778	96.	1.1117	.14219	1693.8	.000747
	94.	.0042	.00851	69.9	.020837	* 97.237	1.1052	.14046	1644.8	.000739
	96.	.0041	.00870	71.5	.021917	* 97.237	.0084	.00893	72.8	.010463
	98.	.0040	.00889	73.0	.023018	98.	.0083	.00901	73.4	.010686
	100.	.0039	.00909	74.6	.024141	100.	.0081	.00920	75.0	.011276
	102.	.0039	.00929	76.1	.025286	102.	.0079	.00939	76.5	.011876
	104.	.0038	.00948	77.7	.026452	104.	.0077	.00959	78.0	.012484
	106.	.0037	.00968	79.2	.027640	106.	.0076	.00978	79.6	.013102
	108.	.0036	.00988	80.8	.028849	108.	.0074	.00998	81.1	.013730
	110.	.0036	.01008	82.3	.030079	110.	.0073	.01018	82.6	.014366
	112.	.0035	.01028	83.8	.031331	112.	.0071	.01037	84.1	.015013
	114.	.0034	.01048	85.3	.032604	114.	.0070	.01057	85.7	.015668
	116.	.0034	.01068	86.9	.033898	116.	.0069	.01077	87.2	.016333
	118.	.0033	.01088	88.4	.035212	118.	.0067	.01097	88.7	.017008
	120.	.0033	.01108	89.9	.036547	120.	.0066	.01116	90.2	.017692
	122.	.0032	.01128	91.4	.037902	122.	.0065	.01136	91.7	.018385
	124.	.0031	.01147	92.9	.039278	124.	.0064	.01156	93.2	.019088
	126.	.0031	.01167	94.4	.040673	126.	.0063	.01175	94.7	.019800
	128.	.0030	.01187	95.9	.042089	128.	.0062	.01195	96.2	.020522
	130.	.0030	.01207	97.4	.043523	130.	.0061	.01215	97.7	.021252
	132.	.0029	.01226	98.9	.044978	132.	.0060	.01234	99.2	.021992
	134.	.0029	.01246	100.4	.046451	134.	.0059	.01254	100.6	.022742
	136.	.0029	.01266	101.8	.047944	136.	.0058	.01273	102.1	.023500
	138.	.0028	.01285	103.3	.049457	138.	.0057	.01293	103.6	.024267
	140.	.0028	.01305	104.8	.050988	140.	.0056	.01312	105.1	.025044
	142.	.0027	.01324	106.2	.052539	142.	.0055	.01332	106.5	.025831
	144.	.0027	.01343	107.7	.054110	144.	.0054	.01351	108.0	.026626
	146.	.0027	.01363	109.2	.055700	146.	.0054	.01370	109.4	.027432
	148.	.0026	.01382	110.6	.057312	148.	.0053	.01389	110.9	.028248
	150.	.0026	.01401	112.1	.058946	150.	.0052	.01409	112.3	.029075
	152.	.0025	.01421	113.5	.060604	152.	.0051	.01428	113.7	.029915
	154.	.0025	.01440	114.9	.062292	154.	.0051	.01448	115.2	.030770
	156.	.0025	.01459	116.4	.063940	156.	.0050	.01466	116.6	.031601
	158.	.0025	.01476	117.8	.065589	158.	.0049	.01484	118.0	.032432
	160.	.0024	.01494	119.2	.067264	160.	.0049	.01501	119.4	.033275
	165.	.0023	.01539	122.7	.071543	165.	.0047	.01546	122.9	.035431
	170.	.0023	.01584	126.2	.075939	170.	.0046	.01590	126.4	.037645
	175.	.0022	.01628	129.7	.080442	175.	.0044	.01635	129.9	.039912
	180.	.0021	.01672	133.1	.085048	180.	.0043	.01678	133.3	.042229
	185.	.0021	.01716	136.5	.089753	185.	.0042	.01722	136.7	.044596
	190.	.0020	.01759	139.8	.094556	190.	.0041	.01765	140.0	.047012
	195.	.0020	.01802	143.1	.099455	195.	.0040	.01807	143.3	.049475
	200.	.0019	.01844	146.4	.104449	200.	.0039	.01850	146.6	.051985
	210.	.0018	.01927	152.9	.114718	210.	.0037	.01933	153.1	.057143
	220.	.0018	.02009	159.3	.125354	220.	.0035	.02015	159.4	.062485
	230.	.0017	.02090	165.5	.136351	230.	.0034	.02096	165.7	.068006
	240.	.0016	.02170	171.6	.147703	240.	.0032	.02175	171.8	.073703
	250.	.0015	.02248	177.7	.159402	250.	.0031	.02254	177.8	.079573
	260.	.0015	.02326	183.6	.171442	260.	.0030	.02332	183.7	.085612
	270.	.0014	.02404	189.4	.183814	270.	.0029	.02409	189.5	.091817
	280.	.0014	.02480	195.1	.196511	280.	.0028	.02485	195.2	.098184
	290.	.0013	.02556	200.7	.209523	290.	.0027	.02561	200.8	.104708
	300.	.0013	.02631	206.3	.222843	300.	.0026	.02637	206.4	.111384
	310.	.0012	.02706	211.7	.236472	310.	.0025	.02712	211.8	.118215
	320.	.0012	.02782	217.1	.250436	320.	.0024	.02787	217.2	.125214

* Two Phase Boundary

Table 5. Transport Properties of Oxygen, Isobars, SI Units.

	.3 MPa Isobar					.4 MPa Isobar				
	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s
*	54.393	1.3064	.20363	4861.6	.000937	* 54.405	1.3064	.20365	4864.7	.000937
	56.	1.2994	.20064	4689.9	.000927	56.	1.2995	.20068	4694.1	.000927
	58.	1.2904	.19708	4473.9	.000916	58.	1.2907	.19712	4477.8	.000916
	60.	1.2818	.19367	4259.1	.000906	60.	1.2819	.19372	4262.7	.000905
	62.	1.2729	.19041	4048.5	.000897	62.	1.2731	.19045	4051.9	.000897
	64.	1.2640	.18725	3844.2	.000886	64.	1.2642	.18730	3847.5	.000888
	66.	1.2551	.18419	3647.6	.000880	66.	1.2552	.18424	3650.7	.000880
	68.	1.2461	.18121	3459.6	.000872	68.	1.2463	.18126	3462.5	.000872
	70.	1.2371	.17829	3280.6	.000864	70.	1.2372	.17835	3283.4	.000864
	72.	1.2280	.17543	3110.9	.000856	72.	1.2281	.17548	3113.6	.000856
	74.	1.2188	.17260	2950.4	.000848	74.	1.2190	.17266	2953.0	.000848
	76.	1.2095	.16981	2798.9	.000840	76.	1.2097	.16987	2801.4	.000840
	78.	1.2002	.16704	2656.2	.000832	78.	1.2004	.16710	2658.6	.000832
	80.	1.1908	.16428	2521.8	.000824	80.	1.1910	.16435	2524.1	.000824
	82.	1.1813	.16154	2395.3	.000815	82.	1.1815	.16161	2397.5	.000816
	84.	1.1718	.15881	2276.3	.000807	84.	1.1720	.15887	2278.5	.000807
	86.	1.1621	.15607	2164.4	.000798	86.	1.1623	.15614	2166.5	.000798
	88.	1.1523	.15333	2059.2	.000788	88.	1.1525	.15340	2061.2	.000789
	90.	1.1424	.15058	1960.0	.000779	90.	1.1426	.15066	1962.0	.000779
	92.	1.1324	.14783	1866.7	.000769	92.	1.1326	.14791	1868.6	.000769
	94.	1.1222	.14506	1778.7	.000758	94.	1.1225	.14514	1780.6	.000759
	96.	1.1119	.14227	1695.7	.000747	96.	1.1122	.14236	1697.5	.000748
	98.	1.1015	.13947	1617.3	.000736	98.	1.1018	.13956	1619.1	.000736
	100.	1.0909	.13665	1543.1	.000724	100.	1.0912	.13674	1544.9	.000724
	102.	1.0801	.13380	1472.8	.000711	102.	1.0804	.13389	1474.6	.000712
*	102.025	1.0799	.13377	1472.0	.000711	104.	1.0694	.13103	1408.0	.000699
*	102.025	.0122	.00950	76.9	.007384	* 105.733	1.0596	.12852	1352.9	.000687
	104.	.0119	.00949	78.4	.007803	* 105.733	.0160	.00996	80.1	.005736
	106.	.0116	.00998	79.9	.008233	106.	.0159	.00998	80.3	.005781
	108.	.0114	.01007	81.5	.008667	108.	.0155	.01017	81.9	.006121
	110.	.0111	.01027	83.0	.009107	110.	.0152	.01036	83.4	.006464
	112.	.0109	.01046	84.5	.009553	112.	.0148	.01056	84.9	.006810
	114.	.0107	.01066	86.0	.010004	114.	.0145	.01075	86.4	.007159
	116.	.0105	.01085	87.5	.010460	116.	.0142	.01094	87.9	.007512
	118.	.0103	.01105	89.0	.010923	118.	.0139	.01114	89.4	.007869
	120.	.0101	.01125	90.5	.011391	120.	.0136	.01133	90.9	.008230
	122.	.0099	.01144	92.0	.011864	122.	.0134	.01153	92.4	.008594
	124.	.0097	.01164	93.5	.012343	124.	.0131	.01172	93.9	.008962
	126.	.0095	.01183	95.0	.012828	126.	.0129	.01191	95.4	.009334
	128.	.0094	.01203	96.5	.013319	128.	.0126	.01211	96.8	.009710
	130.	.0092	.01222	98.0	.013816	130.	.0124	.01230	98.3	.010090
	132.	.0090	.01242	99.5	.014318	132.	.0122	.01250	99.8	.010474
	134.	.0089	.01261	100.9	.014826	134.	.0120	.01269	101.3	.010862
	136.	.0087	.01281	102.4	.015340	136.	.0118	.01288	102.7	.011254
	138.	.0086	.01300	103.9	.015860	138.	.0116	.01308	104.2	.011650
	140.	.0085	.01319	105.3	.016386	140.	.0114	.01327	105.6	.012051
	142.	.0083	.01339	106.8	.016918	142.	.0112	.01346	107.1	.012456
	144.	.0082	.01358	108.2	.017456	144.	.0111	.01365	108.5	.012865
	146.	.0081	.01377	109.7	.018000	146.	.0109	.01384	110.0	.013279
	148.	.0080	.01397	111.1	.018551	148.	.0107	.01404	111.4	.013698
	150.	.0079	.01416	112.6	.019110	150.	.0106	.01423	112.8	.014123
	152.	.0078	.01435	114.0	.019677	152.	.0104	.01443	114.3	.014554
	154.	.0077	.01455	115.4	.020255	154.	.0103	.01462	115.7	.014994
	156.	.0075	.01473	116.8	.020814	156.	.0101	.01480	117.1	.015417
	158.	.0074	.01490	118.3	.021371	158.	.0100	.01497	118.5	.015838
	160.	.0074	.01508	119.7	.021938	160.	.0099	.01515	119.9	.016266
	165.	.0071	.01552	123.2	.023386	165.	.0095	.01559	123.4	.017361
	170.	.0069	.01597	126.6	.024873	170.	.0092	.01603	126.9	.018484
	175.	.0067	.01641	130.1	.026395	175.	.0090	.01647	130.3	.019634
	180.	.0065	.01684	133.5	.027950	180.	.0087	.01690	133.7	.020808
	185.	.0063	.01728	136.9	.029538	185.	.0085	.01733	137.1	.022006
	190.	.0061	.01771	140.2	.031158	190.	.0082	.01776	140.4	.023228
	195.	.0060	.01813	143.5	.032809	195.	.0080	.01819	143.7	.024473
	200.	.0058	.01855	146.8	.034491	200.	.0078	.01861	147.0	.025741
	210.	.0055	.01938	153.2	.037946	210.	.0074	.01944	153.4	.028346
	220.	.0053	.02020	159.6	.041523	220.	.0071	.02025	159.8	.031040
	230.	.0050	.02101	165.8	.045218	230.	.0067	.02106	166.0	.033822
	240.	.0048	.02180	171.9	.049030	240.	.0065	.02186	172.1	.036692
	250.	.0046	.02259	177.9	.052957	250.	.0062	.02264	178.1	.039647
	260.	.0045	.02337	183.8	.056996	260.	.0059	.02342	184.0	.042686
	270.	.0043	.02414	189.6	.061145	270.	.0057	.02419	189.8	.045807
	280.	.0041	.02490	195.3	.065401	280.	.0055	.02495	195.5	.049008
	290.	.0040	.02566	201.0	.069762	290.	.0053	.02571	201.1	.052287
	300.	.0039	.02642	206.5	.074224	300.	.0051	.02646	206.6	.055642
	310.	.0037	.02717	211.9	.078789	310.	.0050	.02721	212.0	.059074
	320.	.0036	.02792	217.3	.083466	320.	.0048	.02796	217.4	.062590

* Two Phase Boundary

Table 5. Transport Properties of Oxygen, Isobars, SI Units.

	.5 MPa Isobar					.6 MPa Isobar				
	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s		Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s
*	54.416	1.3065	.20368	4867.8	.000937	*	54.428	1.3066	.20370	4870.9	.000937
	56.	1.2996	.20073	4698.2	.000928		56.	1.2997	.20078	4702.3	.000928
	58.	1.2908	.19717	4481.7	.000917		58.	1.2909	.19722	4485.5	.000917
	60.	1.2820	.19377	4266.4	.000907		60.	1.2821	.19382	4270.1	.000907
	62.	1.2732	.19050	4055.4	.000897		62.	1.2733	.19055	4058.9	.000898
	64.	1.2643	.18735	3850.7	.000889		64.	1.2644	.18740	3854.0	.000889
	66.	1.2554	.18429	3653.8	.000880		66.	1.2555	.18435	3656.9	.000881
	68.	1.2464	.18132	3465.5	.000872		68.	1.2465	.18137	3468.5	.000873
	70.	1.2374	.17840	3286.3	.000864		70.	1.2375	.17846	3289.1	.000865
	72.	1.2283	.17554	3116.3	.000857		72.	1.2284	.17559	3119.0	.000857
	74.	1.2191	.17272	2955.6	.000849		74.	1.2193	.17277	2958.2	.000849
	76.	1.2099	.16993	2803.9	.000841		76.	1.2100	.16999	2806.4	.000841
	78.	1.2006	.16716	2660.9	.000833		78.	1.2007	.16722	2663.3	.000833
	80.	1.1912	.16441	2526.4	.000825		80.	1.1914	.16448	2528.7	.000825
	82.	1.1817	.16167	2399.7	.000816		82.	1.1819	.16174	2402.0	.000816
	84.	1.1721	.15894	2280.6	.000807		84.	1.1723	.15901	2282.8	.000808
	86.	1.1625	.15621	2168.6	.000798		86.	1.1627	.15628	2170.7	.000799
	88.	1.1527	.15348	2063.2	.000789		88.	1.1529	.15355	2065.2	.000790
	90.	1.1429	.15073	1964.0	.000780		90.	1.1431	.15081	1966.0	.000780
	92.	1.1329	.14798	1870.6	.000770		92.	1.1331	.14806	1872.5	.000770
	94.	1.1227	.14522	1782.5	.000759		94.	1.1230	.14530	1784.4	.000760
	96.	1.1125	.14244	1699.4	.000748		96.	1.1127	.14252	1701.2	.000749
	98.	1.1020	.13964	1620.9	.000737		98.	1.1023	.13973	1622.7	.000737
	100.	1.0914	.13683	1546.7	.000725		100.	1.0917	.13692	1548.4	.000726
	102.	1.0807	.13399	1476.4	.000713		102.	1.0810	.13408	1478.1	.000713
	104.	1.0697	.13112	1409.7	.000699		104.	1.0700	.13122	1411.5	.000700
	106.	1.0585	.12823	1346.4	.000686		106.	1.0588	.12834	1348.1	.000687
	108.	1.0470	.12531	1286.1	.000672		108.	1.0474	.12542	1287.8	.000672
*	108.806	1.0423	.12413	1262.6	.000666		110.	1.0356	.12247	1230.4	.000657
*	108.806	.0197	.01035	82.9	.004695	*	111.457	1.0269	.12030	1190.2	.000646
	110.	.0194	.01046	83.8	.004846	*	111.457	.0235	.01071	85.3	.003972
	112.	.0190	.01065	85.3	.005153		112.	.0233	.01076	85.7	.004040
	114.	.0185	.01084	86.8	.005443		114.	.0227	.01094	87.2	.004290
	116.	.0181	.01104	88.3	.005735		116.	.0222	.01113	88.7	.004542
	118.	.0177	.01123	89.8	.006029		118.	.0216	.01132	90.2	.004795
	120.	.0173	.01142	91.3	.006325		120.	.0212	.01151	91.7	.005049
	122.	.0170	.01161	92.7	.006625		122.	.0207	.01170	93.1	.005306
	124.	.0166	.01180	94.2	.006926		124.	.0203	.01189	94.6	.005564
	126.	.0163	.01200	95.7	.007231		126.	.0199	.01208	96.1	.005824
	128.	.0160	.01219	97.2	.007539		128.	.0195	.01227	97.5	.006086
	130.	.0157	.01238	98.7	.007849		130.	.0191	.01246	99.0	.006350
	132.	.0154	.01257	100.1	.008162		132.	.0187	.01266	100.5	.006617
	134.	.0152	.01277	101.6	.008478		134.	.0184	.01285	101.9	.006886
	136.	.0149	.01296	103.0	.008798		136.	.0181	.01304	103.4	.007157
	138.	.0146	.01315	104.5	.009120		138.	.0178	.01323	104.8	.007430
	140.	.0144	.01334	105.9	.009446		140.	.0175	.01342	106.3	.007706
	142.	.0142	.01353	107.4	.009775		142.	.0172	.01361	107.7	.007985
	144.	.0140	.01373	108.8	.010107		144.	.0169	.01380	109.1	.008266
	146.	.0137	.01392	110.3	.010444		146.	.0166	.01399	110.6	.008551
	148.	.0135	.01411	111.7	.010784		148.	.0164	.01419	112.0	.008838
	150.	.0133	.01430	113.1	.011128		150.	.0161	.01438	113.4	.009130
	152.	.0131	.01450	114.5	.011478		152.	.0159	.01457	114.8	.009426
	154.	.0129	.01470	116.0	.011835		154.	.0156	.01478	116.2	.009727
	156.	.0128	.01487	117.4	.012176		156.	.0154	.01495	117.7	.010015
	158.	.0126	.01504	118.8	.012516		158.	.0152	.01512	119.1	.010299
	160.	.0124	.01522	120.2	.012861		160.	.0150	.01529	120.5	.010589
	165.	.0120	.01565	123.7	.013743		165.	.0145	.01572	123.9	.011330
	170.	.0116	.01609	127.1	.014649		170.	.0140	.01615	127.4	.012091
	175.	.0113	.01653	130.5	.015575		175.	.0136	.01659	130.8	.012868
	180.	.0109	.01696	133.9	.016521		180.	.0132	.01702	134.2	.013662
	185.	.0106	.01739	137.3	.017486		185.	.0128	.01745	137.5	.014471
	190.	.0103	.01782	140.6	.018469		190.	.0124	.01788	140.8	.015295
	195.	.0100	.01824	143.9	.019471		195.	.0121	.01830	144.1	.016135
	200.	.0098	.01866	147.2	.020490		200.	.0118	.01872	147.4	.016989
	210.	.0093	.01949	153.6	.022584		210.	.0112	.01954	153.8	.018742
	220.	.0088	.02031	159.9	.024749		220.	.0106	.02036	160.1	.020554
	230.	.0084	.02111	166.1	.026984		230.	.0102	.02116	166.3	.022424
	240.	.0081	.02191	172.2	.029288		240.	.0097	.02196	172.4	.024351
	250.	.0078	.02269	178.2	.031660		250.	.0093	.02274	178.4	.026335
	260.	.0074	.02347	184.1	.034099		260.	.0089	.02352	184.2	.028373
	270.	.0072	.02424	189.9	.036603		270.	.0086	.02429	190.0	.030466
	280.	.0069	.02500	195.6	.039171		280.	.0083	.02505	195.7	.032612
	290.	.0067	.02576	201.2	.041801		290.	.0080	.02581	201.3	.034810
	300.	.0064	.02651	206.7	.044491		300.	.0077	.02656	206.8	.037057
	310.	.0062	.02726	212.1	.047243		310.	.0075	.02731	212.2	.039355
	320.	.0060	.02801	217.5	.050062		320.	.0072	.02806	217.6	.041710

* Two Phase Boundary

Table 5. Transport Properties of Oxygen, Isobars, SI Units.

	.7 MPa Isobar					.8 MPa Isobar				
	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s
*	54.439	1.3066	.20373	4874.0	.000937	* 54.451	1.3067	.20375	4877.1	.000938
	56.	1.2998	.20082	4706.4	.000928	56.	1.2999	.20087	4710.5	.000928
	58.	1.2911	.19726	4489.4	.000917	58.	1.2912	.19731	4493.3	.000917
	60.	1.2823	.19386	4273.7	.000907	60.	1.2824	.19391	4277.4	.000907
	62.	1.2734	.19060	4062.3	.000898	62.	1.2736	.19065	4065.8	.000898
	64.	1.2646	.18745	3857.3	.000889	64.	1.2647	.18750	3860.6	.000889
	66.	1.2557	.18440	3660.0	.000881	66.	1.2558	.18445	3663.2	.000881
	68.	1.2467	.18142	3471.4	.000873	68.	1.2468	.18147	3474.4	.000873
	70.	1.2377	.17851	3291.9	.000865	70.	1.2378	.17856	3294.8	.000865
	72.	1.2286	.17565	3121.7	.000857	72.	1.2287	.17571	3124.4	.000857
	74.	1.2194	.17283	2960.8	.000849	74.	1.2196	.17289	2963.4	.000850
	76.	1.2102	.17005	2808.9	.000841	76.	1.2104	.17011	2811.4	.000842
	78.	1.2009	.16728	2665.7	.000833	78.	1.2011	.16735	2668.1	.000834
	80.	1.1915	.16454	2531.0	.000825	80.	1.1917	.16460	2533.3	.000826
	82.	1.1821	.16181	2404.2	.000817	82.	1.1823	.16187	2406.4	.000817
	84.	1.1725	.15908	2284.9	.000808	84.	1.1727	.15915	2287.1	.000809
	86.	1.1629	.15635	2172.8	.000799	86.	1.1631	.15642	2174.9	.000800
	88.	1.1531	.15362	2067.2	.000790	88.	1.1534	.15369	2069.3	.000791
	90.	1.1433	.15088	1967.9	.000780	90.	1.1435	.15096	1969.9	.000781
	92.	1.1333	.14814	1874.4	.000771	92.	1.1335	.14822	1876.3	.000771
	94.	1.1232	.14538	1786.2	.000760	94.	1.1235	.14546	1788.1	.000761
	96.	1.1130	.14261	1703.1	.000749	96.	1.1132	.14269	1704.9	.000750
	98.	1.1026	.13982	1624.5	.000738	98.	1.1028	.13990	1626.3	.000739
	100.	1.0920	.13701	1550.2	.000726	100.	1.0923	.13710	1552.0	.000727
	102.	1.0813	.13418	1479.9	.000714	102.	1.0816	.13427	1481.6	.000715
	104.	1.0703	.13132	1413.2	.000701	104.	1.0706	.13142	1414.9	.000702
	106.	1.0591	.12844	1349.8	.000687	106.	1.0595	.12854	1351.6	.000688
	108.	1.0477	.12552	1289.6	.000673	108.	1.0481	.12563	1291.3	.000674
	110.	1.0360	.12258	1232.1	.000658	110.	1.0364	.12269	1233.8	.000659
	112.	1.0240	.11960	1177.2	.000643	112.	1.0244	.11972	1178.9	.000644
*	113.801	1.0129	.11688	1129.8	.000628	114.	1.0121	.11670	1126.4	.000627
*	113.801	.0272	.01103	87.5	.003436	* 115.914	1.0000	.11378	1078.1	.000611
	114.	.0271	.01105	87.7	.003458	* 115.914	.0310	.01134	89.6	.003022
	116.	.0264	.01123	89.1	.003682	116.	.0309	.01134	89.6	.003031
	118.	.0258	.01142	90.6	.003907	118.	.0301	.01153	91.1	.003234
	120.	.0252	.01161	92.1	.004132	120.	.0293	.01171	92.5	.003438
	122.	.0245	.01179	93.6	.004358	122.	.0286	.01189	94.0	.003642
	124.	.0241	.01198	95.0	.004586	124.	.0280	.01208	95.4	.003847
	126.	.0235	.01217	96.5	.004814	126.	.0273	.01227	96.9	.004053
	128.	.0231	.01236	97.9	.005045	128.	.0268	.01245	98.3	.004260
	130.	.0226	.01255	99.4	.005276	130.	.0262	.01264	99.8	.004467
	132.	.0222	.01274	100.8	.005510	132.	.0257	.01283	101.2	.004676
	134.	.0217	.01293	102.3	.005745	134.	.0252	.01302	102.7	.004886
	136.	.0213	.01312	103.7	.005982	136.	.0247	.01320	104.1	.005098
	138.	.0210	.01331	105.2	.006220	138.	.0242	.01339	105.5	.005311
	140.	.0206	.01350	106.6	.006461	140.	.0238	.01358	107.0	.005525
	142.	.0202	.01369	108.0	.006704	142.	.0234	.01377	108.4	.005741
	144.	.0199	.01388	109.5	.006949	144.	.0230	.01396	109.8	.005959
	146.	.0196	.01407	110.9	.007197	146.	.0226	.01415	111.2	.006180
	148.	.0193	.01426	112.3	.007447	148.	.0222	.01434	112.7	.006402
	150.	.0190	.01446	113.7	.007701	150.	.0219	.01454	114.1	.006628
	152.	.0187	.01465	115.1	.007958	152.	.0215	.01473	115.5	.006856
	154.	.0184	.01485	116.5	.008221	154.	.0212	.01494	116.9	.007090
	156.	.0181	.01503	117.9	.008469	156.	.0209	.01511	118.3	.007309
	158.	.0179	.01519	119.3	.008715	158.	.0205	.01527	119.7	.007526
	160.	.0176	.01536	120.7	.008965	160.	.0202	.01543	121.0	.007747
	165.	.0170	.01579	124.2	.009606	165.	.0195	.01585	124.5	.008312
	170.	.0164	.01622	127.6	.010263	170.	.0189	.01628	127.9	.008891
	175.	.0159	.01665	131.0	.010934	175.	.0183	.01671	131.3	.009483
	180.	.0154	.01708	134.4	.011619	180.	.0177	.01714	134.7	.010087
	185.	.0150	.01751	137.7	.012317	185.	.0172	.01757	138.0	.010701
	190.	.0145	.01793	141.1	.013028	190.	.0167	.01799	141.3	.011327
	195.	.0141	.01836	144.3	.013752	195.	.0162	.01841	144.6	.011964
	200.	.0138	.01877	147.6	.014488	200.	.0158	.01883	147.8	.012612
	210.	.0131	.01960	154.0	.015998	210.	.0150	.01965	154.2	.013939
	220.	.0124	.02041	160.3	.017558	220.	.0142	.02047	160.5	.015310
	230.	.0119	.02122	166.5	.019167	230.	.0136	.02127	166.7	.016724
	240.	.0114	.02201	172.5	.020825	240.	.0130	.02206	172.7	.018180
	250.	.0109	.02279	178.5	.022531	250.	.0125	.02284	178.7	.019678
	260.	.0104	.02357	184.4	.024284	260.	.0120	.02362	184.5	.021216
	270.	.0100	.02434	190.2	.026083	270.	.0115	.02438	190.3	.022795
	280.	.0097	.02510	195.8	.027927	280.	.0111	.02515	196.0	.024413
	290.	.0093	.02586	201.4	.029815	290.	.0107	.02590	201.6	.026070
	300.	.0090	.02661	206.9	.031746	300.	.0103	.02665	207.1	.027763
	310.	.0087	.02735	212.4	.033721	310.	.0100	.02740	212.5	.029495
	320.	.0084	.02810	217.7	.035744	320.	.0097	.02815	217.8	.031269

* Two Phase Boundary

Table 5. Transport Properties of Oxygen, Isobars, SI Units.

	.9 MPa Isobar					1.0 MPa Isobar				
	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s
*	54.462	1.3068	.20377	4880.2	.000938	* 54.474	1.3068	.20380	4883.4	.000938
	56.	1.3001	.20091	4714.6	.000928	56.	1.3002	.20096	4718.8	.000928
	58.	1.2913	.19736	4497.2	.000917	58.	1.2914	.19740	4501.0	.000918
	60.	1.2825	.19396	4281.0	.000907	60.	1.2826	.19401	4284.7	.000908
	62.	1.2737	.19070	4069.2	.000898	62.	1.2738	.19075	4072.7	.000898
	64.	1.2648	.18755	3863.8	.000890	64.	1.2650	.18760	3867.1	.000890
	66.	1.2559	.18450	3666.3	.000881	66.	1.2561	.18455	3669.4	.000882
	68.	1.2470	.18153	3477.4	.000873	68.	1.2471	.18158	3480.3	.000874
	70.	1.2379	.17862	3297.6	.000866	70.	1.2381	.17867	3300.4	.000866
	72.	1.2289	.17576	3127.1	.000858	72.	1.2290	.17582	3129.8	.000858
	74.	1.2197	.17295	2966.0	.000850	74.	1.2199	.17301	2968.5	.000850
	76.	1.2105	.17017	2813.8	.000842	76.	1.2107	.17023	2816.3	.000842
	78.	1.2012	.16741	2670.5	.000834	78.	1.2014	.16747	2672.9	.000834
	80.	1.1919	.16467	2535.6	.000826	80.	1.1921	.16473	2537.9	.000826
	82.	1.1824	.16194	2408.6	.000818	82.	1.1826	.16200	2410.8	.000818
	84.	1.1729	.15921	2289.2	.000809	84.	1.1731	.15928	2291.4	.000809
	86.	1.1633	.15649	2176.9	.000800	86.	1.1635	.15656	2179.0	.000801
	88.	1.1536	.15377	2071.3	.000791	88.	1.1538	.15384	2073.3	.000791
	90.	1.1437	.15103	1971.9	.000781	90.	1.1440	.15111	1973.8	.000782
	92.	1.1338	.14829	1878.2	.000772	92.	1.1340	.14837	1880.2	.000772
	94.	1.1237	.14554	1790.0	.000761	94.	1.1239	.14562	1791.9	.000762
	96.	1.1135	.14277	1706.7	.000750	96.	1.1137	.14286	1708.6	.000751
	98.	1.1031	.13999	1628.1	.000739	98.	1.1034	.14008	1629.9	.000740
	100.	1.0926	.13719	1553.8	.000727	100.	1.0929	.13728	1555.6	.000728
	102.	1.0819	.13436	1483.4	.000715	102.	1.0822	.13446	1485.2	.000716
	104.	1.0709	.13151	1416.7	.000702	104.	1.0713	.13161	1418.4	.000703
	106.	1.0598	.12864	1353.3	.000689	106.	1.0601	.12874	1355.0	.000690
	108.	1.0484	.12574	1293.0	.000675	108.	1.0488	.12584	1294.7	.000676
	110.	1.0368	.12280	1235.6	.000660	110.	1.0372	.12291	1237.3	.000661
	112.	1.0248	.11983	1180.7	.000645	112.	1.0253	.11995	1182.4	.000645
	114.	1.0126	.11682	1128.1	.000628	114.	1.0130	.11694	1129.9	.000629
	116.	.9999	.11377	1077.7	.000611	116.	1.0004	.11390	1079.5	.000612
*	117.843	.9879	.11092	1033.0	.000594	118.	.9873	.11081	1031.0	.000594
*	117.843	.0347	.01163	91.5	.002690	* 119.623	.9764	.10826	992.9	.000579
	118.	.0347	.01164	91.6	.002705	* 119.623	.0385	.01190	93.3	.002419
	120.	.0337	.01182	93.0	.002893	120.	.0383	.01194	93.6	.002452
	122.	.0329	.01200	94.5	.003081	122.	.0373	.01211	95.0	.002627
	124.	.0320	.01218	95.9	.003269	124.	.0363	.01229	96.4	.002802
	126.	.0313	.01237	97.3	.003457	126.	.0354	.01247	97.8	.002976
	128.	.0306	.01255	98.8	.003646	128.	.0345	.01265	99.2	.003151
	130.	.0299	.01273	100.2	.003835	130.	.0338	.01283	100.7	.003326
	132.	.0293	.01292	101.7	.004025	132.	.0330	.01302	102.1	.003501
	134.	.0287	.01311	103.1	.004216	134.	.0323	.01320	103.5	.003677
	136.	.0281	.01329	104.5	.004408	136.	.0316	.01338	104.9	.003854
	138.	.0276	.01348	105.9	.004601	138.	.0310	.01357	106.3	.004031
	140.	.0271	.01367	107.4	.004795	140.	.0304	.01376	107.8	.004209
	142.	.0266	.01385	108.8	.004991	142.	.0298	.01394	109.2	.004389
	144.	.0261	.01404	110.2	.005188	144.	.0293	.01413	110.6	.004570
	146.	.0256	.01423	111.6	.005387	146.	.0288	.01432	112.0	.004752
	148.	.0252	.01443	113.0	.005588	148.	.0283	.01451	113.4	.004936
	150.	.0248	.01462	114.4	.005792	150.	.0278	.01471	114.8	.005122
	152.	.0244	.01482	115.8	.005999	152.	.0273	.01491	116.2	.005311
	154.	.0240	.01502	117.2	.006210	154.	.0269	.01511	117.5	.005505
	156.	.0236	.01519	118.6	.006407	156.	.0265	.01527	118.9	.005684
	158.	.0233	.01534	120.0	.006601	158.	.0261	.01543	120.3	.005860
	160.	.0229	.01551	121.4	.006798	160.	.0257	.01559	121.7	.006039
	165.	.0221	.01593	124.8	.007305	165.	.0247	.01600	125.1	.006498
	170.	.0214	.01635	128.2	.007824	170.	.0239	.01642	128.5	.006969
	175.	.0207	.01678	131.6	.008354	175.	.0231	.01684	131.9	.007450
	180.	.0200	.01721	134.9	.008894	180.	.0223	.01727	135.2	.007940
	185.	.0194	.01763	138.2	.009444	185.	.0217	.01769	138.5	.008438
	190.	.0188	.01805	141.5	.010004	190.	.0210	.01811	141.8	.008945
	195.	.0183	.01847	144.8	.010573	195.	.0204	.01853	145.0	.009460
	200.	.0178	.01889	148.0	.011152	200.	.0198	.01894	148.3	.009984
	210.	.0169	.01971	154.4	.012338	210.	.0188	.01976	154.6	.011057
	220.	.0161	.02052	160.7	.013562	220.	.0179	.02057	160.9	.012153
	230.	.0153	.02132	166.8	.014824	230.	.0171	.02137	167.0	.013303
	240.	.0146	.02211	172.9	.016123	240.	.0163	.02216	173.1	.014477
	250.	.0140	.02289	178.8	.017458	250.	.0156	.02294	179.0	.015683
	260.	.0135	.02367	184.7	.018830	260.	.0150	.02372	184.9	.016922
	270.	.0129	.02443	190.5	.020238	270.	.0144	.02448	190.6	.018192
	280.	.0125	.02519	196.1	.021680	280.	.0139	.02524	196.3	.019493
	290.	.0120	.02595	201.7	.023156	290.	.0134	.02600	201.8	.020825
	300.	.0116	.02670	207.2	.024665	300.	.0129	.02675	207.3	.022186
	310.	.0112	.02745	212.6	.026207	310.	.0125	.02749	212.7	.023578
	320.	.0109	.02820	217.9	.027788	320.	.0121	.02824	218.1	.025003

* Two Phase Boundary

Table 5. Transport Properties of Oxygen, Isobars, SI Units.

	1.5 MPa Isobar					2.0 MPa Isobar				
	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s
*	54.531	1.3072	.20392	4898.9	.000938	* 54.589	1.3075	.20404	4914.3	.000939
	56.	1.3008	.20119	4739.4	.000929	56.	1.3013	.20142	4760.1	.000930
	58.	1.2920	.19764	4520.5	.000919	58.	1.2926	.19787	4539.9	.000920
	60.	1.2832	.19425	4303.0	.000909	60.	1.2839	.19449	4321.3	.000910
	62.	1.2744	.19099	4090.0	.000900	62.	1.2751	.19124	4107.4	.000901
	64.	1.2656	.18785	3883.6	.000891	64.	1.2663	.18810	3900.0	.000892
	66.	1.2567	.18481	3685.0	.000883	66.	1.2574	.18506	3700.6	.000884
	68.	1.2478	.18184	3495.2	.000875	68.	1.2485	.18211	3510.0	.000876
	70.	1.2388	.17894	3314.6	.000867	70.	1.2395	.17922	3328.8	.000869
	72.	1.2298	.17610	3143.4	.000859	72.	1.2305	.17638	3156.9	.000861
	74.	1.2207	.17329	2981.5	.000852	74.	1.2215	.17358	2994.5	.000853
	76.	1.2115	.17052	2828.8	.000844	76.	1.2123	.17082	2841.2	.000846
	78.	1.2023	.16778	2684.8	.000836	78.	1.2031	.16808	2696.8	.000838
	80.	1.1929	.16505	2549.4	.000828	80.	1.1938	.16536	2560.9	.000830
	82.	1.1836	.16233	2421.9	.000820	82.	1.1845	.16266	2433.0	.000822
	84.	1.1741	.15962	2302.1	.000811	84.	1.1750	.15996	2312.8	.000813
	86.	1.1645	.15691	2189.4	.000803	86.	1.1655	.15726	2199.8	.000805
	88.	1.1548	.15420	2083.4	.000794	88.	1.1559	.15456	2093.5	.000796
	90.	1.1450	.15148	1983.7	.000784	90.	1.1461	.15185	1993.5	.000786
	92.	1.1352	.14876	1889.7	.000774	92.	1.1363	.14914	1899.3	.000777
	94.	1.1251	.14602	1801.2	.000764	94.	1.1263	.14642	1810.5	.000767
	96.	1.1150	.14327	1717.7	.000754	96.	1.1163	.14368	1726.9	.000756
	98.	1.1047	.14051	1638.9	.000743	98.	1.1060	.14093	1647.9	.000746
	100.	1.0943	.13772	1564.4	.000731	100.	1.0956	.13816	1573.2	.000734
	102.	1.0836	.13492	1493.9	.000719	102.	1.0851	.13538	1502.6	.000722
	104.	1.0728	.13209	1427.1	.000707	104.	1.0744	.13257	1435.7	.000710
	106.	1.0618	.12924	1363.6	.000693	106.	1.0634	.12974	1372.2	.000697
	108.	1.0506	.12636	1303.3	.000680	108.	1.0523	.12688	1311.8	.000684
	110.	1.0390	.12346	1245.8	.000665	110.	1.0409	.12400	1254.3	.000670
	112.	1.0273	.12052	1191.0	.000650	112.	1.0292	.12108	1199.4	.000655
	114.	1.0152	.11754	1138.5	.000634	114.	1.0173	.11814	1147.0	.000639
	116.	1.0027	.11453	1088.2	.000618	116.	1.0050	.11515	1096.8	.000623
	118.	.9898	.11148	1039.8	.000600	118.	.9923	.11213	1048.5	.000606
	120.	.9765	.10837	993.2	.000582	120.	.9792	.10907	1002.1	.000588
	122.	.9627	.10521	948.1	.000562	122.	.9656	.10595	957.2	.000569
	124.	.9483	.10200	904.4	.000541	124.	.9515	.10278	913.7	.000549
	126.	.9331	.09870	861.7	.000519	126.	.9367	.09955	871.4	.000528
*	126.985	.9254	.09705	841.1	.000508	128.	.9211	.09624	830.1	.000505
*	126.985	.0582	.01321	101.5	.001555	130.	.9047	.09284	789.4	.000481
	128.	.0572	.01329	102.1	.001626	132.	.8871	.08935	749.2	.000454
	130.	.0555	.01344	103.4	.001763	* 132.746	.8802	.08802	734.3	.000444
	132.	.0539	.01360	104.7	.001898	* 132.746	.0793	.01453	109.0	.001085
	134.	.0524	.01377	106.1	.002033	134.	.0773	.01460	109.7	.001162
	136.	.0510	.01393	107.4	.002167	136.	.0746	.01472	110.8	.001282
	138.	.0498	.01411	108.7	.002300	138.	.0722	.01486	112.0	.001399
	140.	.0486	.01428	110.1	.002433	140.	.0700	.01500	113.2	.001514
	142.	.0475	.01446	111.4	.002566	142.	.0680	.01516	114.4	.001628
	144.	.0465	.01464	112.8	.002699	144.	.0662	.01532	115.6	.001742
	146.	.0455	.01482	114.1	.002833	146.	.0645	.01549	116.8	.001855
	148.	.0446	.01501	115.5	.002968	148.	.0629	.01567	118.1	.001968
	150.	.0437	.01521	116.8	.003104	150.	.0615	.01587	119.3	.002082
	152.	.0429	.01541	118.1	.003242	152.	.0601	.01608	120.6	.002198
	154.	.0421	.01563	119.5	.003385	154.	.0588	.01631	121.9	.002318
	156.	.0413	.01577	120.8	.003510	156.	.0576	.01641	123.2	.002417
	158.	.0406	.01589	122.2	.003631	158.	.0565	.01648	124.4	.002511
	160.	.0399	.01603	123.5	.003755	160.	.0554	.01657	125.7	.002607
	165.	.0383	.01640	126.8	.004075	165.	.0529	.01687	128.9	.002858
	170.	.0369	.01679	130.1	.004402	170.	.0507	.01723	132.1	.003114
	175.	.0355	.01720	133.4	.004735	175.	.0487	.01760	135.3	.003374
	180.	.0343	.01761	136.7	.005074	180.	.0469	.01798	138.5	.003638
	185.	.0332	.01802	139.9	.005418	185.	.0452	.01837	141.6	.003905
	190.	.0321	.01842	143.2	.005766	190.	.0437	.01877	144.8	.004176
	195.	.0312	.01883	146.4	.006120	195.	.0423	.01916	147.9	.004449
	200.	.0303	.01924	149.5	.006479	200.	.0410	.01956	151.0	.004726
	210.	.0286	.02005	155.8	.007213	210.	.0387	.02035	157.2	.005291
	220.	.0271	.02085	162.0	.007967	220.	.0366	.02114	163.2	.005869
	230.	.0258	.02164	168.1	.008743	230.	.0348	.02192	169.2	.006463
	240.	.0246	.02242	174.0	.009539	240.	.0331	.02269	175.1	.007071
	250.	.0236	.02320	179.9	.010357	250.	.0316	.02346	180.9	.007694
	260.	.0226	.02397	185.7	.011195	260.	.0303	.02422	186.7	.008333
	270.	.0217	.02473	191.4	.012054	270.	.0291	.02498	192.3	.008986
	280.	.0209	.02549	197.0	.012934	280.	.0280	.02573	197.9	.009654
	290.	.0201	.02624	202.6	.013832	290.	.0269	.02648	203.4	.010336
	300.	.0194	.02698	208.0	.014750	300.	.0260	.02722	208.8	.011033
	310.	.0188	.02772	213.4	.015688	310.	.0251	.02796	214.1	.011743
	320.	.0181	.02847	218.7	.016649	320.	.0242	.02870	219.4	.012472

* Two Phase Boundary

Table 5. Transport Properties of Oxygen, Isobars, SI Units.

	2.5 MPa Isobar					3.0 MPa Isobar				
	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s
*	54.646	1.3078	.20416	4929.8	.000939	* 54.703	1.3081	.20428	4945.2	.000940
	56.	1.3019	.20165	4780.8	.000931	56.	1.3025	.20188	4801.6	.000932
	58.	1.2932	.19811	4559.4	.000921	58.	1.2938	.19834	4578.9	.000922
	60.	1.2845	.19472	4339.7	.000911	60.	1.2851	.19496	4358.1	.000912
	62.	1.2757	.19148	4124.7	.000902	62.	1.2763	.19172	4142.1	.000903
	64.	1.2669	.18835	3916.4	.000893	64.	1.2676	.18860	3932.9	.000895
	66.	1.2581	.18532	3716.2	.000885	66.	1.2587	.18558	3731.9	.000887
	68.	1.2492	.18237	3524.9	.000878	68.	1.2499	.18263	3539.8	.000879
	70.	1.2403	.17949	3342.9	.000870	70.	1.2410	.17976	3357.1	.000871
	72.	1.2313	.17666	3170.4	.000862	72.	1.2320	.17693	3184.0	.000864
	74.	1.2222	.17387	3007.4	.000855	74.	1.2230	.17415	3020.4	.000856
	76.	1.2131	.17111	2853.6	.000847	76.	1.2139	.17141	2866.0	.000849
	78.	1.2039	.16839	2708.7	.000839	78.	1.2048	.16869	2720.7	.000841
	80.	1.1947	.16568	2572.4	.000832	80.	1.1956	.16599	2583.8	.000833
	82.	1.1854	.16298	2444.1	.000824	82.	1.1863	.16330	2455.2	.000825
	84.	1.1760	.16029	2323.5	.000815	84.	1.1769	.16062	2334.2	.000817
	86.	1.1665	.15760	2210.2	.000807	86.	1.1675	.15795	2220.5	.000809
	88.	1.1569	.15492	2103.5	.000798	88.	1.1579	.15527	2113.6	.000800
	90.	1.1472	.15222	2003.2	.000789	90.	1.1483	.15259	2013.0	.000791
	92.	1.1374	.14952	1908.8	.000779	92.	1.1385	.14990	1918.3	.000782
	94.	1.1275	.14681	1819.9	.000769	94.	1.1287	.14721	1829.1	.000772
	96.	1.1175	.14409	1736.0	.000759	96.	1.1187	.14450	1745.1	.000762
	98.	1.1073	.14136	1656.8	.000748	98.	1.1086	.14178	1665.7	.000751
	100.	1.0970	.13860	1582.0	.000737	100.	1.0984	.13904	1590.8	.000740
	102.	1.0865	.13583	1511.3	.000726	102.	1.0880	.13628	1519.9	.000729
	104.	1.0759	.13304	1444.2	.000714	104.	1.0774	.13351	1452.7	.000717
	106.	1.0651	.13023	1380.6	.000701	106.	1.0667	.13072	1389.1	.000704
	108.	1.0540	.12739	1320.2	.000688	108.	1.0557	.12790	1328.6	.000691
	110.	1.0427	.12453	1262.7	.000674	110.	1.0445	.12506	1271.0	.000678
	112.	1.0312	.12164	1207.9	.000659	112.	1.0331	.12219	1216.2	.000664
	114.	1.0194	.11872	1155.5	.000644	114.	1.0214	.11930	1163.8	.000649
	116.	1.0072	.11577	1105.3	.000628	116.	1.0094	.11637	1113.7	.000633
	118.	.9947	.11278	1057.1	.000612	118.	.9971	.11341	1065.6	.000617
	120.	.9818	.10975	1010.8	.000594	120.	.9843	.11042	1019.4	.000600
	122.	.9684	.10667	966.1	.000576	122.	.9712	.10738	974.9	.000582
	124.	.9546	.10355	922.9	.000556	124.	.9576	.10430	931.9	.000563
	126.	.9401	.10036	880.9	.000536	126.	.9434	.10116	890.2	.000544
	128.	.9249	.09712	839.9	.000514	128.	.9286	.09797	849.5	.000523
	130.	.9089	.09380	799.8	.000491	130.	.9130	.09472	809.8	.000500
	132.	.8919	.09039	760.2	.000466	132.	.8965	.09138	770.8	.000477
	134.	.8738	.08688	720.9	.000439	134.	.8790	.08797	732.2	.000451
	136.	.8540	.08324	681.5	.000409	136.	.8602	.08445	693.7	.000423
*	137.547	.8374	.08033	650.6	.000384	138.	.8396	.08081	654.9	.000393
*	137.547	.1023	.01603	116.5	.000784	140.	.8168	.07702	615.3	.000359
	138.	.1012	.01604	116.7	.000811	* 141.697	.7949	.07365	580.2	.000325
	140.	.0968	.01609	117.5	.000925	* 141.697	.1281	.01794	124.6	.000571
	142.	.0930	.01618	118.4	.001035	142.	.1269	.01792	124.6	.000590
	144.	.0897	.01630	119.4	.001142	144.	.1201	.01786	124.9	.000705
	146.	.0868	.01643	120.4	.001247	146.	.1146	.01788	125.4	.000814
	148.	.0842	.01659	121.5	.001351	148.	.1099	.01796	126.0	.000918
	150.	.0818	.01677	122.6	.001456	150.	.1059	.01810	126.8	.001021
	152.	.0796	.01699	123.7	.001562	152.	.1023	.01830	127.7	.001125
	154.	.0776	.01725	124.8	.001671	154.	.0992	.01858	128.6	.001231
	156.	.0757	.01727	126.0	.001756	156.	.0963	.01846	129.6	.001308
	158.	.0740	.01724	127.2	.001833	158.	.0937	.01828	130.6	.001376
	160.	.0724	.01727	128.4	.001914	160.	.0912	.01819	131.6	.001447
	165.	.0687	.01746	131.4	.002124	165.	.0860	.01820	134.3	.001631
	170.	.0655	.01774	134.4	.002338	170.	.0815	.01837	137.1	.001819
	175.	.0627	.01807	137.4	.002556	175.	.0776	.01862	139.9	.002009
	180.	.0602	.01842	140.5	.002776	180.	.0742	.01891	142.8	.002200
	185.	.0579	.01878	143.5	.002997	185.	.0711	.01924	145.7	.002392
	190.	.0558	.01915	146.6	.003221	190.	.0684	.01958	148.6	.002584
	195.	.0539	.01953	149.6	.003447	195.	.0659	.01993	151.6	.002779
	200.	.0521	.01991	152.6	.003675	200.	.0637	.02029	154.5	.002974
	210.	.0490	.02068	158.7	.004138	210.	.0596	.02103	160.3	.003370
	220.	.0463	.02144	164.6	.004611	220.	.0562	.02177	166.1	.003774
	230.	.0439	.02221	170.5	.005096	230.	.0532	.02252	171.9	.004185
	240.	.0417	.02297	176.3	.005591	240.	.0505	.02327	177.6	.004606
	250.	.0398	.02373	182.0	.006098	250.	.0481	.02402	183.3	.005035
	260.	.0381	.02449	187.7	.006617	260.	.0460	.02476	188.8	.005473
	270.	.0365	.02524	193.3	.007146	270.	.0440	.02550	194.4	.005921
	280.	.0351	.02598	198.8	.007688	280.	.0423	.02624	199.8	.006377
	290.	.0338	.02672	204.2	.008240	290.	.0406	.02697	205.2	.006843
	300.	.0325	.02746	209.6	.008803	300.	.0392	.02770	210.5	.007317
	310.	.0314	.02819	214.9	.009377	310.	.0378	.02843	215.7	.007801
	320.	.0304	.02893	220.1	.009966	320.	.0365	.02917	220.9	.008297

* Two Phase Boundary

Table 5. Transport Properties of Oxygen, Isobars, SI Units.

3.5 MPa Isobar					4.0 MPa Isobar				
Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s
* 54.760	1.3084	.20440	4960.6	.000941	* 54.817	1.3088	.20452	4975.9	.000941
56.	1.3031	.20211	4822.4	.000933	56.	1.3036	.20234	4843.3	.000934
58.	1.2944	.19857	4598.5	.000923	58.	1.2950	.19880	4618.1	.000923
60.	1.2857	.19520	4376.5	.000913	60.	1.2863	.19544	4395.0	.000914
62.	1.2769	.19196	4159.5	.000904	62.	1.2776	.19221	4176.9	.000905
64.	1.2682	.18885	3949.4	.000896	64.	1.2688	.18910	3965.9	.000897
66.	1.2594	.18583	3747.5	.000888	66.	1.2601	.18608	3763.2	.000889
68.	1.2506	.18289	3554.7	.000880	68.	1.2512	.18315	3569.5	.000881
70.	1.2417	.18002	3371.3	.000873	70.	1.2424	.18029	3385.5	.000874
72.	1.2327	.17721	3197.5	.000865	72.	1.2335	.17749	3211.1	.000867
74.	1.2238	.17444	3033.3	.000858	74.	1.2245	.17472	3046.3	.000859
76.	1.2147	.17170	2878.4	.000850	76.	1.2155	.17199	2890.9	.000852
78.	1.2056	.16899	2732.6	.000843	78.	1.2064	.16929	2744.5	.000844
80.	1.1964	.16630	2595.3	.000835	80.	1.1973	.16661	2606.8	.000837
82.	1.1872	.16362	2466.3	.000827	82.	1.1881	.16395	2477.3	.000829
84.	1.1778	.16096	2344.9	.000819	84.	1.1788	.16129	2355.6	.000821
86.	1.1684	.15829	2230.9	.000811	86.	1.1694	.15863	2241.2	.000813
88.	1.1589	.15562	2123.6	.000802	88.	1.1600	.15598	2133.6	.000804
90.	1.1494	.15296	2022.7	.000793	90.	1.1504	.15332	2032.5	.000795
92.	1.1397	.15028	1927.8	.000784	92.	1.1408	.15066	1937.3	.000786
94.	1.1299	.14760	1838.4	.000774	94.	1.1310	.14798	1847.6	.000777
96.	1.1199	.14490	1754.1	.000764	96.	1.1212	.14530	1763.1	.000767
98.	1.1099	.14219	1674.6	.000754	98.	1.1112	.14261	1683.4	.000757
100.	1.0997	.13947	1599.5	.000743	100.	1.1011	.13990	1608.2	.000746
102.	1.0894	.13673	1528.5	.000732	102.	1.0908	.13718	1537.0	.000735
104.	1.0789	.13398	1461.2	.000720	104.	1.0804	.13444	1469.6	.000723
106.	1.0682	.13120	1397.5	.000708	106.	1.0698	.13168	1405.8	.000711
108.	1.0574	.12840	1336.9	.000695	108.	1.0590	.12890	1345.2	.000699
110.	1.0463	.12558	1279.3	.000682	110.	1.0480	.12610	1287.5	.000686
112.	1.0350	.12274	1224.5	.000668	112.	1.0368	.12328	1232.7	.000672
114.	1.0234	.11987	1172.1	.000653	114.	1.0254	.12043	1180.3	.000658
116.	1.0115	.11697	1122.0	.000638	116.	1.0137	.11756	1130.3	.000643
118.	.9994	.11404	1074.0	.000622	118.	1.0016	.11465	1082.3	.000628
120.	.9868	.11107	1027.9	.000606	120.	.9893	.11172	1036.3	.000611
122.	.9739	.10807	983.6	.000588	122.	.9765	.10875	992.1	.000595
124.	.9605	.10503	940.7	.000570	124.	.9633	.10575	949.4	.000577
126.	.9466	.10194	899.2	.000551	126.	.9497	.10270	908.1	.000558
128.	.9321	.09880	858.9	.000531	128.	.9355	.09961	868.1	.000539
130.	.9169	.09561	819.6	.000509	130.	.9207	.09647	829.1	.000518
132.	.9009	.09234	781.0	.000487	132.	.9051	.09327	791.0	.000497
134.	.8840	.08901	743.0	.000463	134.	.8887	.09001	753.5	.000474
136.	.8659	.08559	705.4	.000437	136.	.8712	.08668	716.5	.000449
138.	.8463	.08208	667.7	.000408	138.	.8525	.08327	679.7	.000423
140.	.8249	.07845	629.5	.000377	140.	.8322	.07978	642.7	.000394
142.	.8009	.07468	590.1	.000342	142.	.8099	.07618	605.0	.000362
144.	.7731	.07075	548.5	.000300	144.	.7846	.07248	566.0	.000326
* 145.365	.7507	.06794	517.5	.000266	146.	.7550	.06866	524.1	.000283
* 145.365	.1579	.02059	133.8	.000409	148.	.7174	.06473	476.4	.000226
146.	.1540	.02045	133.4	.000451	* 148.659	.7018	.06341	458.0	.000202
148.	.1440	.02022	132.9	.000572	* 148.659	.1943	.02467	145.3	.000275
150.	.1363	.02017	132.8	.000684	150.	.1810	.02398	143.0	.000376
152.	.1301	.02028	133.1	.000793	152.	.1674	.02358	141.4	.000507
154.	.1248	.02055	133.6	.000903	154.	.1575	.02364	140.6	.000630
156.	.1203	.02017	134.2	.000978	156.	.1496	.02271	140.4	.000712
158.	.1162	.01971	134.9	.001041	158.	.1431	.02175	140.5	.000778
160.	.1126	.01943	135.6	.001107	160.	.1376	.02114	140.8	.000843
165.	.1050	.01913	137.8	.001276	165.	.1264	.02035	142.2	.001005
170.	.0988	.01913	140.3	.001447	170.	.1178	.02009	144.0	.001165
175.	.0936	.01927	142.8	.001618	175.	.1108	.02006	146.2	.001323
180.	.0891	.01949	145.5	.001788	180.	.1049	.02017	148.5	.001480
185.	.0851	.01976	148.2	.001959	185.	.0999	.02036	151.0	.001636
190.	.0816	.02006	150.9	.002130	190.	.0954	.02060	153.5	.001791
195.	.0785	.02038	153.7	.002302	195.	.0915	.02088	156.2	.001946
200.	.0756	.02071	156.5	.002475	200.	.0880	.02117	158.8	.002102
210.	.0706	.02140	162.2	.002823	210.	.0819	.02181	164.2	.002414
220.	.0663	.02212	167.8	.003177	220.	.0767	.02249	169.7	.002731
230.	.0626	.02285	173.4	.003537	230.	.0723	.02319	175.1	.003051
240.	.0594	.02358	179.0	.003903	240.	.0684	.02390	180.6	.003378
250.	.0565	.02431	184.6	.004277	250.	.0650	.02461	186.0	.003710
260.	.0539	.02504	190.1	.004658	260.	.0620	.02533	191.4	.004048
270.	.0516	.02577	195.5	.005047	270.	.0593	.02605	196.7	.004392
280.	.0495	.02650	200.9	.005443	280.	.0568	.02677	202.0	.004743
290.	.0476	.02723	206.2	.005846	290.	.0546	.02749	207.3	.005099
300.	.0458	.02795	211.4	.006257	300.	.0525	.02820	212.5	.005462
310.	.0442	.02867	216.6	.006675	310.	.0506	.02891	217.6	.005832
320.	.0427	.02941	221.8	.007105	320.	.0488	.02965	222.7	.006211

* Two Phase Boundary

Table 5. Transport Properties of Oxygen, Isobars, SI Units.

	4.5 MPa Isobar					5.0 MPa Isobar				
	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s
*	54.875	1.3091	.20464	4991.2	.000942	* 54.932	1.3094	.20476	5006.5	.000942
	56.	1.3042	.20257	4864.2	.000935	56.	1.3048	.20280	4885.1	.000936
	58.	1.2956	.19904	4637.7	.000924	58.	1.2961	.19927	4657.3	.000925
	60.	1.2869	.19567	4413.5	.000915	60.	1.2875	.19591	4432.0	.000916
	62.	1.2782	.19245	4194.4	.000906	62.	1.2788	.19269	4211.9	.000907
	64.	1.2695	.18934	3982.4	.000898	64.	1.2701	.18959	3998.9	.000899
	66.	1.2607	.18634	3778.8	.000890	66.	1.2614	.18659	3794.5	.000891
	68.	1.2519	.18341	3584.4	.000883	68.	1.2526	.18367	3599.3	.000884
	70.	1.2431	.18056	3399.7	.000875	70.	1.2438	.18083	3413.9	.000877
	72.	1.2342	.17776	3224.6	.000868	72.	1.2349	.17803	3238.2	.000869
	74.	1.2253	.17501	3059.2	.000861	74.	1.2260	.17529	3072.2	.000862
	76.	1.2163	.17229	2903.3	.000853	76.	1.2171	.17258	2915.7	.000855
	78.	1.2072	.16959	2756.4	.000846	78.	1.2081	.16989	2768.3	.000848
	80.	1.1981	.16692	2618.3	.000838	80.	1.1990	.16723	2629.7	.000840
	82.	1.1890	.16426	2488.3	.000831	82.	1.1898	.16458	2499.4	.000833
	84.	1.1797	.16162	2366.3	.000823	84.	1.1806	.16194	2376.9	.000825
	86.	1.1704	.15897	2251.5	.000815	86.	1.1713	.15931	2261.8	.000817
	88.	1.1610	.15633	2143.6	.000806	88.	1.1620	.15668	2153.6	.000808
	90.	1.1515	.15368	2042.2	.000798	90.	1.1525	.15404	2051.9	.000800
	92.	1.1419	.15103	1946.7	.000789	92.	1.1430	.15140	1956.1	.000791
	94.	1.1322	.14837	1856.8	.000779	94.	1.1333	.14875	1866.0	.000782
	96.	1.1224	.14570	1772.1	.000770	96.	1.1235	.14610	1781.1	.000772
	98.	1.1124	.14302	1692.2	.000759	98.	1.1137	.14343	1701.0	.000762
	100.	1.1024	.14033	1616.8	.000749	100.	1.1037	.14075	1625.4	.000752
	102.	1.0922	.13762	1545.5	.000738	102.	1.0936	.13806	1554.0	.000741
	104.	1.0818	.13489	1478.0	.000727	104.	1.0833	.13535	1486.4	.000730
	106.	1.0713	.13215	1414.1	.000715	106.	1.0729	.13262	1422.3	.000718
	108.	1.0606	.12939	1353.4	.000703	108.	1.0622	.12988	1361.6	.000706
	110.	1.0498	.12661	1295.7	.000690	110.	1.0515	.12712	1303.8	.000694
	112.	1.0387	.12381	1240.8	.000676	112.	1.0405	.12434	1248.9	.000680
	114.	1.0273	.12099	1188.4	.000662	114.	1.0292	.12153	1196.5	.000667
	116.	1.0157	.11814	1138.4	.000648	116.	1.0178	.11871	1146.5	.000653
	118.	1.0038	.11526	1090.5	.000633	118.	1.0060	.11586	1098.7	.000638
	120.	.9916	.11236	1044.6	.000617	120.	.9940	.11298	1052.8	.000622
	122.	.9791	.10942	1000.5	.000600	122.	.9816	.11008	1008.8	.000606
	124.	.9661	.10645	958.0	.000583	124.	.9688	.10714	966.4	.000589
	126.	.9527	.10345	916.9	.000565	126.	.9556	.10418	925.4	.000572
	128.	.9388	.10040	877.1	.000546	128.	.9420	.10117	885.8	.000554
	130.	.9243	.09731	838.4	.000527	130.	.9278	.09813	847.4	.000535
	132.	.9091	.09417	800.6	.000506	132.	.9130	.09505	810.0	.000515
	134.	.8932	.09098	763.6	.000484	134.	.8975	.09191	773.4	.000494
	136.	.8763	.08773	727.2	.000461	136.	.8811	.08873	737.5	.000471
	138.	.8583	.08441	691.1	.000436	138.	.8638	.08550	702.1	.000448
	140.	.8390	.08103	655.1	.000409	140.	.8453	.08221	666.9	.000423
	142.	.8180	.07757	618.8	.000380	142.	.8254	.07887	631.7	.000396
	144.	.7946	.07405	581.7	.000348	144.	.8035	.07549	596.0	.000367
	146.	.7681	.07046	542.9	.000311	146.	.7792	.07208	559.4	.000335
	148.	.7365	.06687	500.8	.000267	148.	.7513	.06871	520.8	.000298
	150.	.6952	.06340	451.6	.000208	150.	.7176	.06551	478.6	.000254
*	151.646	.6410	.06085	395.0	.000126	152.	.6724	.06286	428.1	.000194
*	151.646	.2443	.03191	161.9	.000149	154.	.5822	.06213	344.1	.000075
	152.	.2350	.03109	159.4	.000189	* 154.361	.5151	.07770	293.5	.000017
	154.	.2055	.02923	152.7	.000363	* 154.361	.3666	.08153	210.1	.000014
	156.	.1889	.02683	149.9	.000473	156.	.2561	.03528	169.4	.000213
	158.	.1771	.02484	148.5	.000552	158.	.2256	.03004	161.7	.000336
	160.	.1679	.02358	147.8	.000624	160.	.2075	.02732	158.2	.000427
	165.	.1510	.02195	147.6	.000789	165.	.1799	.02411	154.7	.000608
	170.	.1389	.02128	148.6	.000944	170.	.1626	.02278	154.2	.000764
	175.	.1295	.02102	150.1	.001093	175.	.1500	.02218	154.8	.000909
	180.	.1219	.02097	152.0	.001240	180.	.1402	.02192	156.1	.001048
	185.	.1155	.02106	154.2	.001384	185.	.1321	.02186	157.8	.001184
	190.	.1100	.02122	156.5	.001527	190.	.1252	.02192	159.7	.001318
	195.	.1051	.02143	158.9	.001670	195.	.1193	.02206	161.9	.001450
	200.	.1008	.02169	161.3	.001812	200.	.1142	.02225	164.1	.001582
	210.	.0935	.02226	166.4	.002097	210.	.1054	.02274	168.8	.001845
	220.	.0873	.02289	171.6	.002385	220.	.0982	.02331	173.8	.002110
	230.	.0821	.02355	176.9	.002675	230.	.0921	.02394	178.8	.002376
	240.	.0776	.02424	182.2	.002970	240.	.0869	.02459	184.0	.002645
	250.	.0737	.02493	187.5	.003270	250.	.0824	.02526	189.1	.002919
	260.	.0701	.02563	192.8	.003574	260.	.0784	.02594	194.3	.003197
	270.	.0670	.02634	198.0	.003884	270.	.0748	.02663	199.4	.003479
	280.	.0641	.02704	203.2	.004199	280.	.0715	.02732	204.5	.003765
	290.	.0616	.02775	208.4	.004519	290.	.0686	.02802	209.6	.004056
	300.	.0592	.02845	213.5	.004845	300.	.0659	.02871	214.7	.004352
	310.	.0570	.02916	218.6	.005177	310.	.0635	.02941	219.7	.004653
	320.	.0550	.02989	223.6	.005517	320.	.0612	.03013	224.6	.004963

* Two Phase Boundary

Table 5. Transport Properties of Oxygen, Isobars, SI Units.

	5.5 MPa Isobar					6.0 MPa Isobar				
	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s		Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s
*	54.989	1.3097	.20488	5021.7	.000943	*	55.046	1.3100	.20500	5037.0	.000943
	56.	1.3054	.20303	4906.1	.000937		56.	1.3059	.20325	4927.1	.000938
	58.	1.2967	.19950	4677.0	.000926		58.	1.2973	.19973	4696.7	.000927
	60.	1.2881	.19614	4450.5	.000917		60.	1.2887	.19638	4469.1	.000918
	62.	1.2794	.19293	4229.4	.000908		62.	1.2800	.19317	4246.9	.000909
	64.	1.2707	.18983	4015.5	.000900		64.	1.2714	.19008	4032.1	.000901
	66.	1.2620	.18684	3810.2	.000893		66.	1.2627	.18709	3825.9	.000894
	68.	1.2533	.18393	3614.3	.000885		68.	1.2540	.18419	3629.2	.000886
	70.	1.2445	.18109	3428.1	.000878		70.	1.2452	.18136	3442.3	.000879
	72.	1.2357	.17831	3251.7	.000871		72.	1.2364	.17858	3265.3	.000872
	74.	1.2268	.17557	3085.1	.000864		74.	1.2275	.17585	3098.1	.000865
	76.	1.2179	.17287	2928.1	.000856		76.	1.2186	.17315	2940.5	.000858
	78.	1.2089	.17019	2780.2	.000849		78.	1.2097	.17049	2792.1	.000851
	80.	1.1998	.16754	2641.2	.000842		80.	1.2007	.16784	2652.6	.000843
	82.	1.1907	.16490	2510.4	.000834		82.	1.1916	.16521	2521.4	.000836
	84.	1.1815	.16227	2387.5	.000827		84.	1.1824	.16259	2398.2	.000828
	86.	1.1723	.15965	2272.1	.000819		86.	1.1732	.15998	2282.4	.000821
	88.	1.1629	.15702	2163.6	.000810		88.	1.1639	.15737	2173.5	.000812
	90.	1.1535	.15440	2061.5	.000802		90.	1.1546	.15476	2071.2	.000804
	92.	1.1440	.15177	1965.5	.000793		92.	1.1451	.15214	1974.9	.000795
	94.	1.1344	.14914	1875.2	.000784		94.	1.1356	.14951	1884.3	.000786
	96.	1.1247	.14649	1790.1	.000775		96.	1.1259	.14688	1799.0	.000777
	98.	1.1149	.14384	1709.8	.000765		98.	1.1161	.14424	1718.5	.000767
	100.	1.1050	.14117	1634.0	.000755		100.	1.1063	.14159	1642.6	.000757
	102.	1.0949	.13849	1562.4	.000744		102.	1.0963	.13892	1570.8	.000747
	104.	1.0847	.13580	1494.7	.000733		104.	1.0861	.13625	1503.0	.000736
	106.	1.0744	.13309	1430.5	.000722		106.	1.0758	.13355	1438.7	.000725
	108.	1.0638	.13036	1369.7	.000710		108.	1.0654	.13084	1377.8	.000713
	110.	1.0531	.12762	1311.9	.000697		110.	1.0548	.12812	1319.9	.000701
	112.	1.0422	.12486	1256.9	.000684		112.	1.0440	.12537	1264.9	.000688
	114.	1.0311	.12208	1204.5	.000671		114.	1.0330	.12261	1212.4	.000675
	116.	1.0198	.11927	1154.5	.000657		116.	1.0217	.11983	1162.4	.000661
	118.	1.0081	.11645	1106.7	.000643		118.	1.0102	.11703	1114.6	.000647
	120.	.9962	.11360	1060.9	.000627		120.	.9985	.11421	1068.9	.000633
	122.	.9840	.11072	1016.9	.000612		122.	.9864	.11136	1025.0	.000617
	124.	.9714	.10782	974.7	.000595		124.	.9740	.10849	982.8	.000601
	126.	.9585	.10489	933.9	.000578		126.	.9613	.10559	942.2	.000585
	128.	.9451	.10193	894.5	.000561		128.	.9481	.10266	903.0	.000568
	130.	.9312	.09893	856.3	.000542		130.	.9344	.09971	865.0	.000550
	132.	.9167	.09589	819.2	.000523		132.	.9203	.09672	828.1	.000531
	134.	.9016	.09282	783.0	.000503		134.	.9055	.09370	792.2	.000512
	136.	.8857	.08970	747.5	.000482		136.	.8901	.09064	757.2	.000491
	138.	.8690	.08654	712.6	.000459		138.	.8739	.08755	722.8	.000470
	140.	.8512	.08334	678.1	.000436		140.	.8567	.08442	688.9	.000448
	142.	.8322	.08010	643.8	.000411		142.	.8385	.08127	655.3	.000424
	144.	.8116	.07683	609.3	.000384		144.	.8189	.07810	621.8	.000399
	146.	.7890	.07356	574.3	.000355		146.	.7977	.07493	588.1	.000373
	148.	.7637	.07034	538.2	.000323		148.	.7743	.07184	553.7	.000344
	150.	.7344	.06731	500.0	.000287		150.	.7481	.06891	518.2	.000314
	152.	.6987	.06476	457.7	.000244		152.	.7175	.06642	480.4	.000279
	154.	.6499	.06354	406.5	.000187		154.	.6800	.06494	438.4	.000240
	156.	.5532	.06103	323.0	.000081		156.	.6285	.06221	387.7	.000181
	158.	.3267	.04513	196.7	.000117		158.	.5380	.05811	313.7	.000102
	160.	.2681	.03421	176.8	.000239		160.	.3930	.05000	228.0	.000107
	165.	.2156	.02712	164.5	.000451		165.	.2625	.03152	179.2	.000312
	170.	.1898	.02471	161.2	.000613		170.	.2217	.02721	170.3	.000483
	175.	.1727	.02359	160.4	.000756		175.	.1979	.02532	167.2	.000628
	180.	.1599	.02304	160.8	.000891		180.	.1813	.02435	166.4	.000760
	185.	.1497	.02278	161.9	.001021		185.	.1686	.02385	166.6	.000885
	190.	.1413	.02271	163.4	.001147		190.	.1583	.02361	167.5	.001006
	195.	.1342	.02276	165.2	.001272		195.	.1497	.02353	168.9	.001124
	200.	.1280	.02288	167.1	.001395		200.	.1424	.02356	170.5	.001241
	210.	.1177	.02326	171.5	.001641		210.	.1303	.02383	174.3	.001471
	220.	.1093	.02377	176.1	.001886		220.	.1207	.02425	178.6	.001701
	230.	.1023	.02434	180.9	.002132		230.	.1127	.02477	183.1	.001930
	240.	.0964	.02496	185.8	.002381		240.	.1060	.02535	187.8	.002162
	250.	.0912	.02560	190.8	.002633		250.	.1001	.02596	192.6	.002396
	260.	.0867	.02626	195.8	.002889		260.	.0950	.02660	197.5	.002633
	270.	.0826	.02693	200.8	.003148		270.	.0905	.02725	202.4	.002873
	280.	.0790	.02761	205.9	.003411		280.	.0865	.02791	207.3	.003117
	290.	.0757	.02829	210.9	.003678		290.	.0828	.02857	212.2	.003364
	300.	.0727	.02897	215.8	.003949		300.	.0795	.02924	217.1	.003615
	310.	.0700	.02966	220.8	.004226		310.	.0765	.02992	221.9	.003870
	320.	.0675	.03038	225.7	.004510		320.	.0737	.03063	226.8	.004133

* Two Phase Boundary

Table 5. Transport Properties of Oxygen, Isobars, SI Units.

	6.5 MPa Isobar					7.0 MPa Isobar				
	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s
*	55.103	1.3104	.20512	5052.1	.000944	* 55.159	1.3107	.20525	5067.3	.000944
	56.	1.3065	.20348	4948.2	.000939	56.	1.3071	.20371	4969.3	.000939
	58.	1.2979	.19996	4716.5	.000928	58.	1.2985	.20019	4736.3	.000929
	60.	1.2893	.19661	4487.7	.000919	60.	1.2899	.19684	4506.3	.000920
	62.	1.2806	.19341	4264.4	.000910	62.	1.2812	.19364	4282.0	.000911
	64.	1.2720	.19032	4048.6	.000902	64.	1.2726	.19057	4065.2	.000904
	66.	1.2633	.18734	3841.6	.000895	66.	1.2640	.18759	3857.4	.000896
	68.	1.2546	.18445	3644.1	.000888	68.	1.2553	.18470	3659.1	.000889
	70.	1.2459	.18162	3456.5	.000880	70.	1.2466	.18188	3470.7	.000882
	72.	1.2371	.17885	3278.8	.000873	72.	1.2378	.17912	3292.4	.000875
	74.	1.2283	.17613	3111.1	.000866	74.	1.2290	.17641	3124.0	.000868
	76.	1.2194	.17344	2952.9	.000859	76.	1.2202	.17373	2965.3	.000861
	78.	1.2105	.17079	2804.0	.000852	78.	1.2113	.17108	2815.9	.000854
	80.	1.2015	.16815	2664.0	.000845	80.	1.2023	.16845	2675.4	.000847
	82.	1.1925	.16553	2532.4	.000838	82.	1.1933	.16584	2543.4	.000839
	84.	1.1833	.16292	2408.8	.000830	84.	1.1842	.16324	2419.4	.000832
	86.	1.1742	.16031	2292.6	.000822	86.	1.1751	.16065	2302.9	.000824
	88.	1.1649	.15771	2183.4	.000814	88.	1.1659	.15806	2193.4	.000816
	90.	1.1556	.15511	2080.8	.000806	90.	1.1566	.15546	2090.4	.000808
	92.	1.1462	.15250	1984.3	.000798	92.	1.1472	.15287	1993.6	.000800
	94.	1.1367	.14989	1893.4	.000789	94.	1.1378	.15027	1902.5	.000791
	96.	1.1271	.14727	1807.9	.000780	96.	1.1282	.14766	1816.7	.000782
	98.	1.1174	.14464	1727.2	.000770	98.	1.1186	.14504	1735.9	.000773
	100.	1.1075	.14200	1651.1	.000760	100.	1.1088	.14242	1659.6	.000763
	102.	1.0976	.13935	1579.2	.000750	102.	1.0989	.13978	1587.5	.000753
	104.	1.0875	.13669	1511.2	.000739	104.	1.0889	.13713	1519.4	.000742
	106.	1.0773	.13401	1446.8	.000728	106.	1.0788	.13447	1454.9	.000731
	108.	1.0670	.13132	1385.8	.000717	108.	1.0685	.13179	1393.8	.000720
	110.	1.0564	.12861	1327.9	.000705	110.	1.0580	.12910	1335.8	.000708
	112.	1.0457	.12589	1272.8	.000692	112.	1.0474	.12639	1280.6	.000696
	114.	1.0348	.12314	1220.3	.000679	114.	1.0366	.12367	1228.1	.000683
	116.	1.0237	.12038	1170.3	.000666	116.	1.0256	.12093	1178.1	.000670
	118.	1.0123	.11761	1122.5	.000652	118.	1.0143	.11817	1130.3	.000656
	120.	1.0007	.11481	1076.8	.000638	120.	1.0028	.11540	1084.6	.000642
	122.	.9888	.11199	1033.0	.000623	122.	.9911	.11260	1040.9	.000628
	124.	.9765	.10914	990.9	.000607	124.	.9790	.10979	998.8	.000613
	126.	.9640	.10628	950.4	.000591	126.	.9666	.10695	958.4	.000597
	128.	.9510	.10339	911.3	.000574	128.	.9539	.10410	919.5	.000581
	130.	.9376	.10047	873.5	.000557	130.	.9407	.10122	881.9	.000564
	132.	.9237	.09752	836.9	.000539	132.	.9271	.09831	845.4	.000546
	134.	.9093	.09455	801.3	.000520	134.	.9130	.09538	810.1	.000528
	136.	.8943	.09155	766.5	.000501	136.	.8983	.09243	775.7	.000509
	138.	.8785	.08851	732.6	.000480	138.	.8830	.08945	742.1	.000490
	140.	.8619	.08546	699.2	.000459	140.	.8669	.08645	709.2	.000470
	142.	.8444	.08238	666.3	.000437	142.	.8500	.08344	676.8	.000449
	144.	.8257	.07929	633.6	.000414	144.	.8321	.08043	644.7	.000427
	146.	.8056	.07622	600.9	.000389	146.	.8129	.07744	612.9	.000404
	148.	.7838	.07322	567.9	.000363	148.	.7924	.07452	581.1	.000380
	150.	.7597	.07039	534.3	.000336	150.	.7700	.07176	548.9	.000355
	152.	.7326	.06792	499.4	.000307	152.	.7452	.06932	516.1	.000330
	154.	.7009	.06629	462.2	.000277	154.	.7173	.06758	481.9	.000305
	156.	.6619	.06357	421.0	.000234	156.	.6847	.06489	445.6	.000270
	158.	.6095	.05997	372.1	.000178	158.	.6450	.06153	405.8	.000228
	160.	.5297	.05568	309.8	.000126	160.	.5935	.05809	360.1	.000183
	165.	.3295	.03806	203.8	.000205	165.	.4127	.04563	242.8	.000163
	170.	.2601	.03048	182.5	.000374	170.	.3069	.03470	199.5	.000288
	175.	.2265	.02743	175.6	.000519	175.	.2589	.03002	186.1	.000428
	180.	.2047	.02591	172.9	.000650	180.	.2303	.02773	180.6	.000556
	185.	.1887	.02508	172.0	.000771	185.	.2103	.02648	178.2	.000675
	190.	.1762	.02462	172.2	.000888	190.	.1951	.02576	177.4	.000788
	195.	.1659	.02440	173.0	.001001	195.	.1829	.02536	177.5	.000896
	200.	.1573	.02432	174.2	.001112	200.	.1728	.02515	178.2	.001002
	210.	.1433	.02444	177.4	.001330	210.	.1566	.02510	180.7	.001209
	220.	.1323	.02477	181.2	.001545	220.	.1441	.02532	184.1	.001414
	230.	.1233	.02523	185.5	.001761	230.	.1340	.02570	187.9	.001617
	240.	.1157	.02575	189.9	.001978	240.	.1255	.02618	192.1	.001821
	250.	.1092	.02633	194.5	.002197	250.	.1183	.02672	196.5	.002027
	260.	.1035	.02694	199.2	.002418	260.	.1120	.02729	201.1	.002235
	270.	.0985	.02757	204.0	.002642	270.	.1065	.02789	205.7	.002445
	280.	.0940	.02821	208.8	.002869	280.	.1016	.02851	210.3	.002657
	290.	.0900	.02886	213.6	.003099	290.	.0972	.02915	215.0	.002873
	300.	.0863	.02951	218.4	.003332	300.	.0932	.02979	219.7	.003091
	310.	.0830	.03018	223.2	.003570	310.	.0895	.03044	224.4	.003313
	320.	.0800	.03088	227.9	.003815	320.	.0862	.03114	229.1	.003542

* Two Phase Boundary

Table 5. Transport Properties of Oxygen, Isobars, SI Units.

	7.5 MPa Isobar					8.0 MPa Isobar				
	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s
*	55.216	1.3110	.20537	5082.4	.000945	* 55.273	1.3113	.20549	5097.4	.000945
	56.	1.3076	.20393	4990.4	.000940	56.	1.3082	.20416	5011.6	.000941
	58.	1.2990	.20042	4756.1	.000930	58.	1.2996	.20065	4776.0	.000931
	60.	1.2904	.19708	4524.9	.000921	60.	1.2910	.19731	4543.6	.000922
	62.	1.2819	.19388	4299.5	.000912	62.	1.2825	.19412	4317.1	.000914
	64.	1.2733	.19081	4081.9	.000905	64.	1.2739	.19105	4098.5	.000906
	66.	1.2646	.18784	3873.1	.000897	66.	1.2653	.18809	3888.9	.000898
	68.	1.2560	.18496	3674.0	.000890	68.	1.2566	.18521	3689.0	.000891
	70.	1.2473	.18215	3484.9	.000883	70.	1.2480	.18241	3499.2	.000884
	72.	1.2385	.17939	3306.0	.000876	72.	1.2393	.17966	3319.5	.000877
	74.	1.2298	.17668	3137.0	.000869	74.	1.2305	.17696	3149.9	.000871
	76.	1.2210	.17401	2977.7	.000862	76.	1.2217	.17430	2990.1	.000864
	78.	1.2121	.17137	2827.8	.000855	78.	1.2129	.17167	2839.7	.000857
	80.	1.2032	.16876	2686.9	.000848	80.	1.2040	.16906	2698.3	.000850
	82.	1.1942	.16615	2554.4	.000841	82.	1.1950	.16646	2565.4	.000843
	84.	1.1851	.16356	2430.0	.000834	84.	1.1860	.16388	2440.6	.000836
	86.	1.1760	.16098	2313.1	.000826	86.	1.1770	.16131	2323.3	.000828
	88.	1.1669	.15840	2203.3	.000818	88.	1.1678	.15874	2213.2	.000820
	90.	1.1576	.15581	2100.0	.000810	90.	1.1586	.15616	2109.6	.000812
	92.	1.1483	.15323	2003.0	.000802	92.	1.1493	.15359	2012.3	.000804
	94.	1.1389	.15064	1911.6	.000793	94.	1.1399	.15101	1920.7	.000796
	96.	1.1294	.14804	1825.6	.000784	96.	1.1305	.14843	1834.4	.000787
	98.	1.1198	.14544	1744.5	.000775	98.	1.1209	.14584	1753.2	.000778
	100.	1.1100	.14283	1668.1	.000765	100.	1.1113	.14323	1676.5	.000768
	102.	1.1002	.14020	1595.8	.000755	102.	1.1015	.14062	1604.1	.000758
	104.	1.0903	.13757	1527.6	.000745	104.	1.0916	.13800	1535.7	.000748
	106.	1.0802	.13492	1463.0	.000734	106.	1.0816	.13537	1471.0	.000737
	108.	1.0700	.13226	1401.7	.000723	108.	1.0715	.13272	1409.6	.000726
	110.	1.0596	.12958	1343.6	.000712	110.	1.0612	.13006	1351.4	.000715
	112.	1.0491	.12689	1288.4	.000700	112.	1.0508	.12739	1296.2	.000703
	114.	1.0384	.12419	1235.9	.000687	114.	1.0401	.12470	1243.6	.000691
	116.	1.0275	.12147	1185.8	.000674	116.	1.0293	.12200	1193.5	.000678
	118.	1.0163	.11873	1138.1	.000661	118.	1.0183	.11929	1145.7	.000665
	120.	1.0050	.11598	1092.4	.000647	120.	1.0070	.11656	1100.1	.000652
	122.	.9933	.11321	1048.7	.000633	122.	.9955	.11381	1056.4	.000638
	124.	.9814	.11042	1006.7	.000618	124.	.9838	.11105	1014.5	.000623
	126.	.9692	.10762	966.4	.000603	126.	.9717	.10827	974.2	.000608
	128.	.9566	.10479	927.6	.000587	128.	.9593	.10547	935.5	.000593
	130.	.9437	.10195	890.1	.000570	130.	.9466	.10266	898.2	.000577
	132.	.9303	.09908	853.9	.000553	132.	.9335	.09983	862.1	.000560
	134.	.9165	.09619	818.7	.000536	134.	.9199	.09698	827.2	.000543
	136.	.9022	.09328	784.6	.000518	136.	.9059	.09412	793.3	.000526
	138.	.8872	.09036	751.3	.000499	138.	.8913	.09124	760.3	.000508
	140.	.8716	.08741	718.8	.000480	140.	.8761	.08835	728.1	.000489
	142.	.8552	.08447	686.9	.000460	142.	.8603	.08545	696.6	.000470
	144.	.8380	.08152	655.4	.000439	144.	.8436	.08257	665.7	.000450
	146.	.8197	.07860	624.3	.000417	146.	.8260	.07971	635.2	.000430
	148.	.8002	.07575	593.4	.000395	148.	.8074	.07692	605.0	.000409
	150.	.7791	.07305	562.4	.000373	150.	.7875	.07427	574.9	.000388
	152.	.7562	.07063	531.1	.000350	152.	.7660	.07187	544.8	.000367
	154.	.7309	.06881	499.0	.000328	154.	.7427	.07000	514.3	.000348
	156.	.7024	.06616	465.8	.000299	156.	.7169	.06738	483.3	.000322
	158.	.6693	.06296	430.7	.000264	158.	.6880	.06431	451.2	.000293
	160.	.6296	.05979	392.7	.000228	160.	.6548	.06129	417.5	.000262
	165.	.4891	.05072	287.2	.000170	165.	.5444	.05358	325.7	.000196
	170.	.3618	.03963	222.6	.000236	170.	.4190	.04428	250.8	.000217
	175.	.2958	.03311	199.4	.000356	175.	.3367	.03660	215.9	.000305
	180.	.2584	.02986	189.9	.000478	180.	.2890	.03229	200.9	.000416
	185.	.2335	.02808	185.4	.000593	185.	.2582	.02988	193.6	.000525
	190.	.2151	.02704	183.3	.000702	190.	.2361	.02845	190.0	.000630
	195.	.2006	.02642	182.6	.000807	195.	.2192	.02758	188.2	.000731
	200.	.1888	.02606	182.7	.000909	200.	.2055	.02704	187.5	.000828
	210.	.1703	.02580	184.3	.001107	210.	.1844	.02656	188.2	.001018
	220.	.1562	.02591	187.1	.001301	220.	.1685	.02653	190.4	.001203
	230.	.1449	.02620	190.6	.001494	230.	.1559	.02673	193.4	.001387
	240.	.1355	.02662	194.5	.001687	240.	.1455	.02708	197.0	.001570
	250.	.1275	.02711	198.6	.001881	250.	.1368	.02753	200.9	.001754
	260.	.1206	.02766	203.0	.002077	260.	.1292	.02803	205.0	.001939
	270.	.1145	.02823	207.4	.002274	270.	.1226	.02858	209.2	.002126
	280.	.1092	.02883	211.9	.002475	280.	.1168	.02915	213.6	.002316
	290.	.1044	.02944	216.5	.002677	290.	.1116	.02974	218.1	.002507
	300.	.1000	.03006	221.1	.002882	300.	.1069	.03035	222.6	.002701
	310.	.0961	.03071	225.7	.003091	310.	.1027	.03098	227.1	.002898
	320.	.0925	.03140	230.3	.003307	320.	.0988	.03166	231.6	.003102

* Two Phase Boundary

Table 5. Transport Properties of Oxygen, Isobars, SI Units.

	8.5 MPa Isobar					9.0 MPa Isobar				
	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s		Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s
*	55.330	1.3116	.20561	5112.5	.000946	*	55.386	1.3119	.20573	5127.5	.000946
	56.	1.3087	.20439	5032.9	.000942		56.	1.3093	.20461	5054.1	.000943
	58.	1.3002	.20088	4795.8	.000932		58.	1.3008	.20111	4815.8	.000933
	60.	1.2916	.19754	4562.3	.000923		60.	1.2922	.19778	4581.0	.000924
	62.	1.2831	.19436	4334.7	.000915		62.	1.2837	.19459	4352.4	.000916
	64.	1.2745	.19130	4115.1	.000907		64.	1.2751	.19154	4131.8	.000908
	66.	1.2659	.18834	3904.6	.000899		66.	1.2665	.18859	3920.4	.000901
	68.	1.2573	.18547	3703.9	.000892		68.	1.2579	.18572	3718.9	.000894
	70.	1.2486	.18267	3513.4	.000886		70.	1.2493	.18293	3527.6	.000887
	72.	1.2400	.17993	3333.1	.000879		72.	1.2407	.18020	3346.7	.000880
	74.	1.2312	.17724	3162.9	.000872		74.	1.2320	.17751	3175.8	.000873
	76.	1.2225	.17458	3002.5	.000865		76.	1.2232	.17487	3014.9	.000867
	78.	1.2137	.17196	2851.6	.000858		78.	1.2144	.17225	2863.5	.000860
	80.	1.2048	.16936	2709.7	.000852		80.	1.2056	.16966	2721.1	.000853
	82.	1.1959	.16677	2576.4	.000844		82.	1.1967	.16708	2587.3	.000846
	84.	1.1869	.16420	2451.1	.000837		84.	1.1878	.16452	2461.7	.000839
	86.	1.1779	.16164	2333.5	.000830		86.	1.1788	.16196	2343.7	.000832
	88.	1.1688	.15907	2223.0	.000822		88.	1.1697	.15941	2232.9	.000824
	90.	1.1596	.15651	2119.2	.000814		90.	1.1606	.15686	2128.7	.000816
	92.	1.1504	.15395	2021.6	.000806		92.	1.1514	.15431	2030.8	.000808
	94.	1.1410	.15138	1929.7	.000798		94.	1.1421	.15175	1938.7	.000800
	96.	1.1316	.14881	1843.2	.000789		96.	1.1327	.14919	1852.0	.000791
	98.	1.1221	.14623	1761.8	.000780		98.	1.1233	.14662	1770.3	.000783
	100.	1.1125	.14364	1684.9	.000771		100.	1.1137	.14404	1693.3	.000773
	102.	1.1028	.14104	1612.4	.000761		102.	1.1041	.14146	1620.6	.000764
	104.	1.0930	.13843	1543.8	.000751		104.	1.0943	.13886	1551.9	.000754
	106.	1.0830	.13581	1478.9	.000740		106.	1.0844	.13625	1486.9	.000743
	108.	1.0730	.13318	1417.5	.000730		108.	1.0744	.13364	1425.3	.000733
	110.	1.0628	.13054	1359.2	.000718		110.	1.0643	.13101	1367.0	.000722
	112.	1.0524	.12788	1303.9	.000707		112.	1.0540	.12837	1311.5	.000710
	114.	1.0418	.12521	1251.3	.000695		114.	1.0436	.12572	1258.9	.000699
	116.	1.0311	.12253	1201.1	.000682		116.	1.0329	.12305	1208.7	.000686
	118.	1.0202	.11984	1153.3	.000670		118.	1.0221	.12038	1160.9	.000674
	120.	1.0091	.11713	1107.7	.000656		120.	1.0111	.11769	1115.2	.000661
	122.	.9977	.11440	1064.0	.000643		122.	.9999	.11499	1071.6	.000647
	124.	.9861	.11167	1022.1	.000628		124.	.9884	.11227	1029.7	.000633
	126.	.9742	.10891	982.0	.000614		126.	.9766	.10955	989.6	.000619
	128.	.9620	.10615	943.3	.000599		128.	.9646	.10681	951.1	.000604
	130.	.9495	.10336	906.1	.000583		130.	.9522	.10405	914.0	.000589
	132.	.9366	.10057	870.2	.000567		132.	.9396	.10129	878.2	.000574
	134.	.9233	.09775	835.5	.000551		134.	.9265	.09851	843.6	.000558
	136.	.9095	.09493	801.8	.000534		136.	.9130	.09572	810.1	.000541
	138.	.8953	.09209	769.0	.000516		138.	.8991	.09292	777.5	.000524
	140.	.8805	.08925	737.2	.000498		140.	.8846	.09012	746.0	.000507
	142.	.8650	.08640	706.0	.000480		142.	.8696	.08733	715.2	.000489
	144.	.8489	.08357	675.5	.000461		144.	.8539	.08454	685.1	.000471
	146.	.8319	.08077	645.6	.000442		146.	.8375	.08179	655.6	.000453
	148.	.8141	.07804	616.0	.000422		148.	.8203	.07911	626.5	.000434
	150.	.7951	.07543	586.7	.000402		150.	.8022	.07654	597.9	.000416
	152.	.7749	.07305	557.5	.000383		152.	.7830	.07418	569.5	.000397
	154.	.7531	.07114	528.3	.000365		154.	.7625	.07224	541.2	.000381
	156.	.7294	.06856	498.8	.000342		156.	.7404	.06970	513.0	.000360
	158.	.7034	.06559	468.8	.000316		158.	.7165	.06682	484.5	.000336
	160.	.6743	.06269	438.0	.000289		160.	.6904	.06401	455.6	.000312
	165.	.5831	.05557	356.3	.000227		165.	.6118	.05723	381.0	.000255
	170.	.4707	.04795	280.4	.000218		170.	.5138	.05045	308.5	.000231
	175.	.3797	.04017	235.4	.000276		175.	.4218	.04342	256.8	.000264
	180.	.3219	.03496	213.8	.000368		180.	.3561	.03773	228.6	.000335
	185.	.2846	.03187	203.1	.000469		185.	.3122	.03402	213.8	.000424
	190.	.2583	.03001	197.4	.000568		190.	.2814	.03170	205.7	.000517
	195.	.2384	.02885	194.3	.000665		195.	.2584	.03022	201.1	.000610
	200.	.2227	.02811	192.8	.000759		200.	.2404	.02926	198.6	.000700
	210.	.1988	.02737	192.3	.000941		210.	.2135	.02823	196.8	.000874
	220.	.1810	.02718	193.8	.001118		220.	.1938	.02787	197.5	.001044
	230.	.1671	.02728	196.4	.001293		230.	.1784	.02786	199.5	.001212
	240.	.1557	.02756	199.5	.001468		240.	.1660	.02806	202.3	.001378
	250.	.1461	.02795	203.2	.001643		250.	.1555	.02840	205.6	.001545
	260.	.1379	.02842	207.1	.001819		260.	.1467	.02882	209.2	.001713
	270.	.1308	.02893	211.2	.001997		270.	.1389	.02929	213.1	.001882
	280.	.1245	.02948	215.4	.002176		280.	.1322	.02981	217.2	.002053
	290.	.1189	.03005	219.7	.002357		290.	.1261	.03036	221.4	.002225
	300.	.1138	.03064	224.1	.002541		300.	.1207	.03093	225.6	.002399
	310.	.1092	.03125	228.5	.002727		310.	.1158	.03153	229.9	.002577
	320.	.1051	.03192	232.9	.002921		320.	.1114	.03219	234.3	.002761

* Two Phase Boundary

Table 5. Transport Properties of Oxygen, Isobars, SI Units.

	9.5 MPa Isobar					10.0 MPa Isobar				
	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s
*	55.443	1.3122	.20585	5142.4	.000947	* 55.500	1.3126	.20597	5157.4	.000947
	56.	1.3099	.20494	5075.5	.000944	56.	1.3104	.20506	5096.8	.000945
	58.	1.3013	.20133	4835.7	.000934	58.	1.3019	.20156	4855.7	.000935
	60.	1.2928	.19801	4599.7	.000925	60.	1.2934	.19824	4618.5	.000926
	62.	1.2843	.19483	4370.0	.000917	62.	1.2849	.19507	4387.7	.000918
	64.	1.2757	.19178	4148.5	.000909	64.	1.2763	.19202	4165.2	.000910
	66.	1.2672	.18883	3936.2	.000902	66.	1.2678	.18908	3952.0	.000903
	68.	1.2586	.18597	3733.9	.000895	68.	1.2593	.18623	3748.9	.000896
	70.	1.2500	.18319	3541.9	.000888	70.	1.2507	.18345	3556.1	.000889
	72.	1.2414	.18046	3360.2	.000881	72.	1.2421	.18073	3373.8	.000883
	74.	1.2327	.17779	3188.8	.000875	74.	1.2334	.17806	3201.8	.000876
	76.	1.2240	.17515	3027.3	.000868	76.	1.2247	.17543	3039.7	.000870
	78.	1.2152	.17254	2875.3	.000861	78.	1.2160	.17283	2887.2	.000863
	80.	1.2064	.16996	2732.5	.000855	80.	1.2072	.17025	2743.9	.000856
	82.	1.1976	.16739	2598.3	.000848	82.	1.1984	.16770	2609.3	.000849
	84.	1.1887	.16483	2472.3	.000841	84.	1.1895	.16515	2482.8	.000842
	86.	1.1797	.16229	2353.9	.000834	86.	1.1806	.16261	2364.1	.000835
	88.	1.1707	.15975	2242.7	.000826	88.	1.1716	.16008	2252.6	.000828
	90.	1.1616	.15720	2138.3	.000818	90.	1.1625	.15755	2147.8	.000820
	92.	1.1524	.15466	2040.1	.000810	92.	1.1534	.15501	2049.3	.000813
	94.	1.1432	.15212	1947.7	.000802	94.	1.1442	.15248	1956.7	.000804
	96.	1.1338	.14956	1860.8	.000794	96.	1.1349	.14994	1869.5	.000796
	98.	1.1244	.14701	1778.9	.000785	98.	1.1256	.14739	1787.4	.000787
	100.	1.1149	.14444	1701.7	.000776	100.	1.1161	.14484	1710.0	.000778
	102.	1.1053	.14187	1628.8	.000766	102.	1.1066	.14228	1636.9	.000769
	104.	1.0956	.13929	1559.9	.000757	104.	1.0970	.13971	1567.9	.000759
	106.	1.0858	.13669	1494.8	.000746	106.	1.0872	.13713	1502.7	.000749
	108.	1.0759	.13409	1433.1	.000736	108.	1.0773	.13454	1440.9	.000739
	110.	1.0658	.13148	1374.6	.000725	110.	1.0673	.13194	1382.3	.000728
	112.	1.0556	.12885	1319.2	.000714	112.	1.0572	.12933	1326.7	.000717
	114.	1.0452	.12622	1266.4	.000702	114.	1.0469	.12671	1273.9	.000706
	116.	1.0347	.12357	1216.2	.000690	116.	1.0365	.12408	1223.7	.000694
	118.	1.0240	.12091	1168.4	.000678	118.	1.0258	.12144	1175.8	.000682
	120.	1.0131	.11825	1122.7	.000665	120.	1.0150	.11879	1130.1	.000669
	122.	1.0020	.11557	1079.0	.000652	122.	1.0040	.11614	1086.4	.000656
	124.	.9906	.11287	1037.2	.000638	124.	.9928	.11347	1044.7	.000643
	126.	.9790	.11017	997.2	.000624	126.	.9813	.11079	1004.6	.000629
	128.	.9671	.10746	958.7	.000610	128.	.9696	.10810	966.2	.000615
	130.	.9550	.10473	921.7	.000595	130.	.9576	.10540	929.3	.000601
	132.	.9425	.10199	886.0	.000580	132.	.9453	.10269	893.7	.000586
	134.	.9296	.09925	851.6	.000564	134.	.9327	.09997	859.4	.000571
	136.	.9164	.09650	818.2	.000548	136.	.9197	.09725	826.2	.000555
	138.	.9027	.09374	785.9	.000532	138.	.9063	.09453	794.1	.000539
	140.	.8886	.09098	754.6	.000515	140.	.8924	.09181	763.0	.000523
	142.	.8739	.08822	724.1	.000498	142.	.8781	.08909	732.7	.000507
	144.	.8587	.08548	694.3	.000481	144.	.8633	.08640	703.2	.000490
	146.	.8428	.08278	665.2	.000463	146.	.8479	.08373	674.5	.000473
	148.	.8262	.08014	636.6	.000445	148.	.8318	.08113	646.3	.000456
	150.	.8088	.07760	608.5	.000428	150.	.8150	.07863	618.7	.000439
	152.	.7905	.07527	580.8	.000411	152.	.7974	.07631	591.5	.000423
	154.	.7710	.07330	553.3	.000395	154.	.7789	.07433	564.7	.000408
	156.	.7503	.07079	526.0	.000376	156.	.7592	.07185	538.2	.000390
	158.	.7281	.06799	498.7	.000354	158.	.7384	.06912	511.8	.000370
	160.	.7041	.06526	471.3	.000332	160.	.7161	.06645	485.6	.000350
	165.	.6342	.05871	401.9	.000280	165.	.6527	.06009	420.0	.000302
	170.	.5486	.05246	333.6	.000248	170.	.5766	.05414	355.6	.000267
	175.	.4606	.04615	278.8	.000263	175.	.4948	.04837	300.3	.000269
	180.	.3904	.04044	244.9	.000316	180.	.4234	.04291	262.0	.000306
	185.	.3406	.03626	225.7	.000391	185.	.3693	.03849	238.7	.000368
	190.	.3053	.03349	214.9	.000476	190.	.3297	.03535	224.9	.000443
	195.	.2791	.03168	208.6	.000563	195.	.3002	.03322	216.6	.000524
	200.	.2587	.03048	204.8	.000648	200.	.2773	.03176	211.5	.000605
	210.	.2285	.02914	201.5	.000816	210.	.2437	.03010	206.6	.000765
	220.	.2067	.02859	201.3	.000979	220.	.2198	.02935	205.4	.000922
	230.	.1899	.02846	202.7	.001140	230.	.2014	.02909	206.2	.001076
	240.	.1763	.02858	205.1	.001299	240.	.1868	.02912	208.1	.001229
	250.	.1650	.02885	208.1	.001459	250.	.1746	.02932	210.7	.001382
	260.	.1555	.02923	211.5	.001619	260.	.1643	.02964	213.8	.001535
	270.	.1472	.02967	215.2	.001781	270.	.1554	.03005	217.3	.001690
	280.	.1399	.03016	219.1	.001943	280.	.1476	.03050	221.0	.001845
	290.	.1334	.03068	223.1	.002108	290.	.1407	.03100	224.9	.002002
	300.	.1276	.03122	227.2	.002273	300.	.1345	.03152	228.9	.002161
	310.	.1224	.03181	231.4	.002443	310.	.1290	.03209	233.0	.002322
	320.	.1177	.03246	235.7	.002618	320.	.1239	.03273	237.1	.002490

* Two Phase Boundary

Table 5. Transport Properties of Oxygen, Isobars, SI Units.

	11.0 MPa Isobar					12.0 MPa Isobar				
	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s
*	55.613	1.3132	.20621	5187.1	.000948	* 55.726	1.3138	.20645	5216.7	.000949
	56.	1.3115	.20551	5139.7	.000946	56.	1.3126	.20596	5182.7	.000948
	58.	1.3030	.20201	4895.8	.000936	58.	1.3041	.20247	4936.0	.000938
	60.	1.2945	.19870	4656.1	.000927	60.	1.2957	.19916	4693.8	.000929
	62.	1.2861	.19553	4423.1	.000919	62.	1.2872	.19600	4458.6	.000921
	64.	1.2776	.19250	4198.6	.000912	64.	1.2788	.19298	4232.1	.000914
	66.	1.2691	.18957	3983.6	.000905	66.	1.2703	.19006	4015.3	.000907
	68.	1.2606	.18673	3778.9	.000898	68.	1.2619	.18723	3808.9	.000901
	70.	1.2520	.18396	3584.7	.000892	70.	1.2534	.18448	3613.2	.000894
	72.	1.2435	.18126	3401.0	.000885	72.	1.2448	.18179	3428.1	.000888
	74.	1.2349	.17861	3227.7	.000879	74.	1.2363	.17915	3253.6	.000881
	76.	1.2262	.17599	3064.4	.000872	76.	1.2277	.17655	3089.2	.000875
	78.	1.2176	.17341	2910.9	.000866	78.	1.2191	.17398	2934.6	.000869
	80.	1.2088	.17085	2766.6	.000859	80.	1.2104	.17143	2789.4	.000862
	82.	1.2001	.16830	2631.1	.000853	82.	1.2017	.16891	2653.0	.000856
	84.	1.1913	.16578	2503.9	.000846	84.	1.1930	.16640	2524.9	.000849
	86.	1.1824	.16326	2384.4	.000839	86.	1.1842	.16390	2404.7	.000842
	88.	1.1735	.16074	2272.2	.000832	88.	1.1753	.16140	2291.8	.000835
	90.	1.1645	.15823	2166.8	.000824	90.	1.1664	.15891	2185.8	.000828
	92.	1.1554	.15572	2067.7	.000817	92.	1.1574	.15641	2086.1	.000821
	94.	1.1463	.15320	1974.6	.000809	94.	1.1484	.15392	1992.4	.000813
	96.	1.1371	.15068	1886.9	.000801	96.	1.1393	.15142	1904.3	.000805
	98.	1.1279	.14816	1804.4	.000792	98.	1.1301	.14892	1821.3	.000797
	100.	1.1185	.14563	1726.6	.000783	100.	1.1208	.14641	1743.1	.000788
	102.	1.1091	.14309	1653.2	.000774	102.	1.1115	.14389	1669.3	.000779
	104.	1.0995	.14054	1583.8	.000765	104.	1.1021	.14137	1599.6	.000770
	106.	1.0899	.13799	1518.3	.000755	106.	1.0925	.13884	1533.8	.000761
	108.	1.0801	.13543	1456.3	.000745	108.	1.0829	.13630	1471.5	.000751
	110.	1.0703	.13286	1397.5	.000735	110.	1.0732	.13376	1412.5	.000741
	112.	1.0603	.13028	1341.7	.000724	112.	1.0633	.13121	1356.6	.000731
	114.	1.0502	.12769	1288.8	.000713	114.	1.0533	.12865	1303.5	.000720
	116.	1.0399	.12509	1238.4	.000702	116.	1.0432	.12608	1253.0	.000709
	118.	1.0294	.12249	1190.5	.000690	118.	1.0330	.12351	1204.9	.000697
	120.	1.0188	.11988	1144.7	.000678	120.	1.0225	.12093	1159.1	.000686
	122.	1.0080	.11725	1101.1	.000665	122.	1.0120	.11835	1115.4	.000674
	124.	.9971	.11463	1059.3	.000652	124.	1.0012	.11576	1073.7	.000661
	126.	.9859	.11199	1019.3	.000639	126.	.9902	.11316	1033.7	.000649
	128.	.9744	.10935	981.0	.000626	128.	.9790	.11056	995.5	.000636
	130.	.9627	.10670	944.2	.000612	130.	.9677	.10796	958.7	.000623
	132.	.9508	.10404	908.8	.000598	132.	.9560	.10535	923.5	.000609
	134.	.9385	.10138	874.7	.000583	134.	.9441	.10274	889.5	.000595
	136.	.9260	.09872	841.8	.000569	136.	.9319	.10014	856.8	.000581
	138.	.9131	.09607	810.0	.000554	138.	.9195	.09754	825.3	.000567
	140.	.8998	.09341	779.2	.000538	140.	.9066	.09494	794.8	.000552
	142.	.8861	.09077	749.4	.000523	142.	.8935	.09236	765.3	.000538
	144.	.8719	.08814	720.4	.000507	144.	.8800	.08980	736.7	.000523
	146.	.8573	.08555	692.2	.000491	146.	.8660	.08728	709.0	.000508
	148.	.8422	.08302	664.7	.000476	148.	.8516	.08480	682.0	.000494
	150.	.8264	.08058	637.8	.000460	150.	.8367	.08242	655.7	.000479
	152.	.8101	.07830	611.6	.000445	152.	.8214	.08016	630.1	.000465
	154.	.7930	.07629	585.8	.000432	154.	.8054	.07815	605.1	.000453
	156.	.7751	.07488	560.5	.000416	156.	.7888	.07579	580.7	.000438
	158.	.7563	.07126	535.5	.000398	158.	.7716	.07326	556.7	.000422
	160.	.7365	.06871	510.9	.000381	160.	.7536	.07081	533.3	.000407
	165.	.6820	.06263	450.6	.000339	165.	.7050	.06494	476.4	.000369
	170.	.6192	.05701	392.3	.000305	170.	.6507	.05953	422.2	.000337
	175.	.5500	.05184	339.1	.000291	175.	.5912	.05462	372.0	.000318
	180.	.4822	.04700	296.6	.000306	180.	.5301	.05016	328.8	.000319
	185.	.4244	.04263	266.7	.000345	185.	.4734	.04609	295.2	.000342
	190.	.3786	.03908	247.2	.000401	190.	.4250	.04251	271.1	.000382
	195.	.3431	.03641	234.6	.000467	195.	.3855	.03957	254.4	.000433
	200.	.3154	.03449	226.5	.000537	200.	.3536	.03729	243.1	.000492
	210.	.2749	.03214	217.7	.000682	210.	.3065	.03430	229.9	.000620
	220.	.2464	.03096	214.2	.000827	220.	.2734	.03267	223.9	.000752
	230.	.2249	.03041	213.5	.000969	230.	.2486	.03182	221.5	.000884
	240.	.2078	.03024	214.4	.001111	240.	.2291	.03143	221.2	.001015
	250.	.1938	.03030	216.3	.001252	250.	.2132	.03133	222.2	.001146
	260.	.1820	.03052	218.8	.001393	260.	.1999	.03143	224.0	.001277
	270.	.1719	.03083	221.8	.001535	270.	.1885	.03165	226.5	.001409
	280.	.1631	.03122	225.1	.001678	280.	.1786	.03196	229.4	.001541
	290.	.1553	.03166	228.6	.001822	290.	.1700	.03234	232.5	.001674
	300.	.1484	.03214	232.3	.001968	300.	.1623	.03276	235.9	.001809
	310.	.1422	.03266	236.2	.002116	310.	.1553	.03325	239.5	.001946
	320.	.1365	.03329	240.1	.002271	320.	.1491	.03385	243.2	.002090

* Two Phase Boundary

Table 5. Transport Properties of Oxygen, Isobars, SI Units.

	13.0 MPa Isobar					14.0 MPa Isobar				
	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s		Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s
*	55.838	1.3144	.20669	5246.1	.000950	*	55.951	1.3150	.20694	5275.4	.000951
	56.	1.3137	.20640	5225.8	.000949		56.	1.3148	.20685	5269.1	.000951
	58.	1.3053	.20292	4976.3	.000940		58.	1.3064	.20337	5016.7	.000941
	60.	1.2968	.19961	4731.6	.000931		60.	1.2980	.20007	4769.5	.000933
	62.	1.2884	.19647	4494.2	.000923		62.	1.2896	.19693	4529.8	.000925
	64.	1.2800	.19345	4265.6	.000916		64.	1.2812	.19392	4299.3	.000918
	66.	1.2716	.19054	4047.0	.000909		66.	1.2728	.19103	4078.8	.000911
	68.	1.2631	.18773	3839.0	.000903		68.	1.2644	.18822	3859.1	.000905
	70.	1.2547	.18499	3641.8	.000896		70.	1.2560	.18550	3670.3	.000899
	72.	1.2462	.18231	3455.3	.000890		72.	1.2476	.18283	3482.5	.000893
	74.	1.2377	.17968	3279.5	.000884		74.	1.2391	.18022	3305.4	.000887
	76.	1.2292	.17710	3114.0	.000878		76.	1.2306	.17765	3138.7	.000881
	78.	1.2206	.17455	2958.3	.000872		78.	1.2221	.17511	2982.0	.000875
	80.	1.2120	.17202	2812.1	.000865		80.	1.2135	.17260	2834.8	.000868
	82.	1.2033	.16951	2674.8	.000859		82.	1.2049	.17011	2696.6	.000862
	84.	1.1946	.16702	2545.9	.000853		84.	1.1963	.16763	2566.9	.000856
	86.	1.1859	.16453	2424.9	.000846		86.	1.1876	.16516	2445.1	.000849
	88.	1.1771	.16205	2311.3	.000839		88.	1.1789	.16270	2330.8	.000842
	90.	1.1683	.15958	2204.6	.000832		90.	1.1701	.16024	2223.5	.000836
	92.	1.1594	.15710	2104.4	.000825		92.	1.1613	.15779	2122.7	.000828
	94.	1.1504	.15463	2010.2	.000817		94.	1.1524	.15533	2027.9	.000821
	96.	1.1414	.15215	1921.6	.000809		96.	1.1435	.15287	1938.7	.000813
	98.	1.1323	.14967	1838.1	.000801		98.	1.1345	.15041	1854.8	.000806
	100.	1.1231	.14718	1759.5	.000793		100.	1.1254	.14794	1775.8	.000798
	102.	1.1139	.14469	1685.3	.000784		102.	1.1162	.14547	1701.3	.000789
	104.	1.1046	.14219	1615.4	.000775		104.	1.1070	.14299	1631.0	.000780
	106.	1.0951	.13968	1549.2	.000766		106.	1.0977	.14051	1564.5	.000772
	108.	1.0856	.13717	1486.7	.000757		108.	1.0883	.13802	1501.7	.000762
	110.	1.0760	.13465	1427.4	.000747		110.	1.0788	.13553	1442.2	.000753
	112.	1.0663	.13213	1371.3	.000737		112.	1.0692	.13303	1385.8	.000743
	114.	1.0564	.12959	1318.0	.000726		114.	1.0595	.13052	1332.4	.000733
	116.	1.0465	.12706	1267.4	.000716		116.	1.0497	.12802	1281.6	.000723
	118.	1.0364	.12452	1219.2	.000705		118.	1.0397	.12550	1233.3	.000712
	120.	1.0261	.12197	1173.3	.000693		120.	1.0296	.12299	1187.3	.000701
	122.	1.0157	.11942	1129.6	.000682		122.	1.0194	.12047	1143.5	.000690
	124.	1.0052	.11686	1087.8	.000670		124.	1.0090	.11794	1101.7	.000678
	126.	.9944	.11430	1047.8	.000658		126.	.9985	.11542	1061.7	.000666
	128.	.9835	.11174	1009.6	.000645		128.	.9878	.11290	1023.5	.000654
	130.	.9724	.10918	972.9	.000633		130.	.9769	.11037	986.8	.000642
	132.	.9610	.10662	937.8	.000620		132.	.9658	.10785	951.7	.000630
	134.	.9494	.10406	903.9	.000606		134.	.9545	.10534	918.0	.000617
	136.	.9376	.10150	871.4	.000593		136.	.9430	.10282	885.6	.000604
	138.	.9255	.09895	840.1	.000579		138.	.9313	.10032	854.4	.000591
	140.	.9131	.09641	809.8	.000566		140.	.9193	.09783	824.3	.000578
	142.	.9004	.09389	780.6	.000552		142.	.9070	.09535	795.3	.000565
	144.	.8874	.09139	752.3	.000538		144.	.8944	.09290	767.3	.000552
	146.	.8741	.08892	724.9	.000524		146.	.8816	.09048	740.2	.000538
	148.	.8603	.08650	698.4	.000510		148.	.8684	.08811	713.9	.000525
	150.	.8462	.08415	672.6	.000497		150.	.8549	.08581	688.5	.000513
	152.	.8316	.08193	647.5	.000484		152.	.8410	.08362	663.9	.000500
	154.	.8166	.07992	623.1	.000472		154.	.8267	.08160	639.9	.000489
	156.	.8010	.07761	599.3	.000458		156.	.8121	.07934	616.6	.000476
	158.	.7850	.07516	576.1	.000443		158.	.7970	.07696	594.0	.000463
	160.	.7684	.07278	553.4	.000429		160.	.7814	.07464	571.9	.000449
	165.	.7241	.06709	499.0	.000395		165.	.7404	.06911	519.3	.000418
	170.	.6756	.06184	447.7	.000366		170.	.6962	.06398	470.1	.000390
	175.	.6231	.05707	400.1	.000345		175.	.6490	.05930	424.5	.000369
	180.	.5685	.05279	357.7	.000338		180.	.5996	.05512	383.3	.000359
	185.	.5152	.04894	322.5	.000350		185.	.5503	.05139	347.7	.000362
	190.	.4669	.04549	295.3	.000377		190.	.5037	.04807	318.8	.000380
	195.	.4254	.04250	275.3	.000416		195.	.4620	.04512	296.2	.000410
	200.	.3908	.04003	260.9	.000464		200.	.4258	.04258	279.3	.000448
	210.	.3380	.03653	243.2	.000575		210.	.3688	.03874	257.3	.000543
	220.	.3004	.03446	234.3	.000695		220.	.3273	.03630	245.5	.000650
	230.	.2724	.03330	230.1	.000816		230.	.2961	.03482	239.2	.000762
	240.	.2504	.03268	228.5	.000938		240.	.2717	.03397	236.2	.000875
	250.	.2326	.03241	228.5	.001060		250.	.2519	.03353	235.2	.000989
	260.	.2177	.03238	229.6	.001182		260.	.2356	.03336	235.5	.001103
	270.	.2051	.03250	231.5	.001305		270.	.2216	.03337	236.7	.001217
	280.	.1942	.03273	233.9	.001428		280.	.2096	.03352	238.6	.001332
	290.	.1846	.03304	236.7	.001552		290.	.1991	.03376	241.0	.001448
	300.	.1761	.03341	239.8	.001676		300.	.1899	.03407	243.7	.001565
	310.	.1685	.03385	243.0	.001804		310.	.1816	.03446	246.7	.001684
	320.	.1616	.03442	246.5	.001938		320.	.1741	.03501	249.9	.001809

* Two Phase Boundary

Table 5. Transport Properties of Oxygen, Isobars, SI Units.

	15.0 MPa Isobar					16.0 MPa Isobar				
	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s
*	56.063	1.3157	.20718	5304.5	.000952	* 56.176	1.3163	.20742	5333.4	.000953
	58.	1.3075	.20381	5057.3	.000943	58.	1.3086	.20426	5098.0	.000944
	60.	1.2991	.20052	4807.5	.000935	60.	1.3002	.20098	4845.7	.000936
	62.	1.2907	.19739	4565.6	.000927	62.	1.2919	.19785	4601.4	.000929
	64.	1.2824	.19440	4332.9	.000920	64.	1.2836	.19486	4366.7	.000922
	66.	1.2740	.19151	4110.6	.000914	66.	1.2752	.19199	4142.5	.000916
	68.	1.2657	.18872	3899.2	.000907	68.	1.2669	.18921	3929.4	.000909
	70.	1.2573	.18600	3699.0	.000901	70.	1.2586	.18650	3727.6	.000903
	72.	1.2489	.18335	3509.7	.000895	72.	1.2502	.18387	3536.9	.000898
	74.	1.2405	.18075	3331.3	.000889	74.	1.2419	.18128	3357.3	.000892
	76.	1.2321	.17819	3163.5	.000883	76.	1.2335	.17874	3188.2	.000886
	78.	1.2236	.17567	3005.7	.000877	78.	1.2251	.17623	3029.3	.000880
	80.	1.2151	.17317	2857.5	.000871	80.	1.2166	.17375	2880.1	.000874
	82.	1.2065	.17070	2718.3	.000865	82.	1.2081	.17129	2740.1	.000868
	84.	1.1980	.16824	2587.8	.000859	84.	1.1996	.16884	2608.7	.000862
	86.	1.1893	.16579	2465.3	.000853	86.	1.1910	.16641	2485.4	.000856
	88.	1.1807	.16334	2350.2	.000846	88.	1.1824	.16396	2369.6	.000849
	90.	1.1720	.16090	2242.3	.000839	90.	1.1738	.16156	2261.0	.000843
	92.	1.1632	.15846	2140.8	.000832	92.	1.1651	.15914	2159.0	.000836
	94.	1.1544	.15603	2045.5	.000825	94.	1.1564	.15672	2063.1	.000829
	96.	1.1455	.15359	1955.9	.000818	96.	1.1476	.15429	1972.9	.000822
	98.	1.1366	.15114	1871.5	.000810	98.	1.1387	.15187	1888.1	.000814
	100.	1.1276	.14870	1792.0	.000802	100.	1.1298	.14944	1808.2	.000807
	102.	1.1185	.14624	1717.1	.000794	102.	1.1208	.14701	1732.9	.000799
	104.	1.1094	.14379	1646.5	.000785	104.	1.1118	.14458	1661.9	.000790
	106.	1.1002	.14133	1579.7	.000777	106.	1.1027	.14214	1594.8	.000782
	108.	1.0909	.13886	1516.6	.000768	108.	1.0935	.13969	1531.4	.000773
	110.	1.0815	.13639	1456.9	.000759	110.	1.0842	.13725	1471.4	.000764
	112.	1.0720	.13392	1400.3	.000749	112.	1.0748	.13479	1414.6	.000755
	114.	1.0625	.13144	1346.6	.000739	114.	1.0654	.13234	1360.7	.000745
	116.	1.0528	.12896	1295.6	.000729	116.	1.0558	.12988	1309.5	.000736
	118.	1.0430	.12647	1247.2	.000719	118.	1.0462	.12742	1261.0	.000725
	120.	1.0331	.12398	1201.1	.000708	120.	1.0364	.12496	1214.7	.000715
	122.	1.0230	.12149	1157.2	.000697	122.	1.0265	.12250	1170.7	.000705
	124.	1.0128	.11900	1115.3	.000686	124.	1.0165	.12004	1128.7	.000694
	126.	1.0025	.11651	1075.3	.000675	126.	1.0063	.11758	1088.7	.000683
	128.	.9920	.11402	1037.1	.000663	128.	.9960	.11512	1050.4	.000672
	130.	.9813	.11154	1000.5	.000651	130.	.9856	.11267	1013.8	.000660
	132.	.9705	.10905	965.4	.000639	132.	.9749	.11022	978.7	.000649
	134.	.9594	.10657	931.7	.000627	134.	.9642	.10778	945.1	.000637
	136.	.9482	.10410	899.4	.000615	136.	.9532	.10535	912.9	.000625
	138.	.9368	.10164	868.3	.000602	138.	.9421	.10293	881.9	.000613
	140.	.9251	.09920	838.4	.000590	140.	.9307	.10052	852.0	.000601
	142.	.9132	.09677	809.5	.000577	142.	.9191	.09813	823.3	.000589
	144.	.9011	.09436	781.7	.000565	144.	.9074	.09576	795.7	.000577
	146.	.8887	.09196	754.8	.000552	146.	.8953	.09343	769.0	.000565
	148.	.8760	.08965	728.9	.000540	148.	.8831	.09114	743.2	.000553
	150.	.8630	.08739	703.7	.000527	150.	.8706	.08891	718.3	.000541
	152.	.8497	.08522	679.4	.000516	152.	.8578	.08677	694.3	.000530
	154.	.8361	.08322	655.8	.000505	154.	.8447	.08477	671.0	.000520
	156.	.8221	.08099	632.9	.000493	156.	.8314	.08258	648.4	.000508
	158.	.8078	.07868	610.7	.000480	158.	.8178	.08032	626.5	.000496
	160.	.7931	.07642	589.2	.000468	160.	.8038	.07811	605.3	.000485
	165.	.7548	.07101	537.9	.000438	165.	.7676	.07282	555.1	.000457
	170.	.7139	.06598	490.2	.000413	170.	.7293	.06789	508.6	.000433
	175.	.6705	.06139	446.1	.000392	175.	.6891	.06335	465.7	.000413
	180.	.6254	.05726	406.1	.000380	180.	.6474	.05927	426.6	.000399
	185.	.5798	.05359	370.8	.000378	185.	.6050	.05563	391.8	.000394
	190.	.5357	.05034	340.9	.000388	190.	.5634	.05241	361.6	.000400
	195.	.4948	.04745	316.7	.000410	195.	.5239	.04955	336.3	.000415
	200.	.4582	.04491	297.7	.000441	200.	.4876	.04703	315.8	.000440
	210.	.3983	.04088	272.0	.000522	210.	.4264	.04291	286.8	.000508
	220.	.3536	.03814	257.2	.000617	220.	.3791	.03995	269.2	.000592
	230.	.3195	.03639	248.8	.000719	230.	.3425	.03795	258.8	.000685
	240.	.2928	.03531	244.3	.000824	240.	.3136	.03666	252.7	.000783
	250.	.2712	.03468	242.2	.000930	250.	.2903	.03586	249.5	.000882
	260.	.2533	.03437	241.7	.001037	260.	.2709	.03541	248.1	.000981
	270.	.2381	.03427	242.2	.001144	270.	.2545	.03520	247.9	.001082
	280.	.2251	.03433	243.6	.001252	280.	.2404	.03516	248.7	.001183
	290.	.2136	.03449	245.5	.001360	290.	.2280	.03524	250.2	.001285
	300.	.2036	.03474	247.9	.001469	300.	.2172	.03542	252.1	.001388
	310.	.1946	.03509	250.5	.001581	310.	.2075	.03572	254.5	.001493
	320.	.1865	.03560	253.5	.001700	320.	.1988	.03620	257.1	.001605

* Two Phase Boundary

Table 5. Transport Properties of Oxygen, Isobars, SI Units.

	17.0 MPa Isobar					18.0 MPa Isobar				
	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s		Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s
*	56.288	1.3169	.20766	5362.2	.000954	*	56.399	1.3175	.20790	5390.9	.000955
	58.	1.3097	.20470	5138.9	.000946		58.	1.3108	.20515	5179.8	.000948
	60.	1.3013	.20143	4883.9	.000938		60.	1.3025	.20187	4922.2	.000940
	62.	1.2930	.19831	4637.3	.000931		62.	1.2942	.19877	4673.2	.000932
	64.	1.2847	.19533	4400.5	.000924		64.	1.2859	.19580	4434.3	.000926
	66.	1.2765	.19247	4174.4	.000918		66.	1.2777	.19294	4206.4	.000920
	68.	1.2682	.18970	3959.6	.000912		68.	1.2694	.19018	3989.8	.000914
	70.	1.2599	.18700	3756.2	.000906		70.	1.2611	.18750	3784.9	.000908
	72.	1.2516	.18438	3564.2	.000900		72.	1.2529	.18489	3591.4	.000902
	74.	1.2432	.18181	3383.2	.000894		74.	1.2446	.18233	3409.1	.000897
	76.	1.2349	.17928	3212.9	.000889		76.	1.2363	.17981	3237.7	.000891
	78.	1.2265	.17678	3053.0	.000883		78.	1.2280	.17733	3076.6	.000886
	80.	1.2181	.17432	2902.8	.000877		80.	1.2196	.17488	2925.4	.000880
	82.	1.2097	.17187	2761.8	.000871		82.	1.2112	.17245	2783.5	.000874
	84.	1.2012	.16944	2629.5	.000865		84.	1.2028	.17004	2650.4	.000868
	86.	1.1927	.16702	2505.4	.000859		86.	1.1944	.16763	2525.5	.000862
	88.	1.1842	.16461	2389.0	.000853		88.	1.1859	.16524	2408.3	.000856
	90.	1.1756	.16220	2279.7	.000846		90.	1.1774	.16285	2298.3	.000850
	92.	1.1670	.15980	2177.0	.000840		92.	1.1688	.16046	2195.1	.000843
	94.	1.1583	.15740	2080.6	.000833		94.	1.1602	.15808	2098.1	.000837
	96.	1.1496	.15500	1989.9	.000826		96.	1.1515	.15569	2006.9	.000830
	98.	1.1408	.15259	1904.6	.000819		98.	1.1428	.15330	1921.1	.000823
	100.	1.1320	.15018	1824.3	.000811		100.	1.1341	.15091	1840.3	.000815
	102.	1.1231	.14777	1748.6	.000803		102.	1.1253	.14852	1764.2	.000808
	104.	1.1141	.14535	1677.2	.000795		104.	1.1164	.14613	1692.4	.000800
	106.	1.1051	.14294	1609.8	.000787		106.	1.1075	.14373	1624.6	.000792
	108.	1.0960	.14051	1546.1	.000778		108.	1.0985	.14132	1560.6	.000783
	110.	1.0868	.13809	1485.8	.000770		110.	1.0894	.13892	1500.1	.000775
	112.	1.0776	.13566	1428.7	.000761		112.	1.0802	.13651	1442.8	.000766
	114.	1.0682	.13323	1374.6	.000751		114.	1.0710	.13410	1388.5	.000757
	116.	1.0588	.13079	1323.3	.000742		116.	1.0617	.13169	1336.9	.000748
	118.	1.0493	.12836	1274.6	.000732		118.	1.0523	.12928	1288.0	.000738
	120.	1.0396	.12593	1228.2	.000722		120.	1.0428	.12687	1241.5	.000729
	122.	1.0299	.12349	1184.1	.000712		122.	1.0332	.12446	1197.2	.000719
	124.	1.0200	.12106	1142.0	.000701		124.	1.0235	.12206	1155.1	.000709
	126.	1.0100	.11863	1101.9	.000691		126.	1.0137	.11966	1114.9	.000698
	128.	.9999	.11620	1063.6	.000680		128.	1.0037	.11726	1076.5	.000688
	130.	.9897	.11378	1026.9	.000669		130.	.9937	.11486	1039.8	.000677
	132.	.9793	.11136	991.8	.000658		132.	.9834	.11248	1004.7	.000666
	134.	.9687	.10896	958.2	.000646		134.	.9731	.11010	971.1	.000655
	136.	.9580	.10656	926.0	.000635		136.	.9626	.10774	938.9	.000644
	138.	.9471	.10417	895.1	.000623		138.	.9520	.10538	908.0	.000633
	140.	.9360	.10180	865.3	.000612		140.	.9412	.10305	878.3	.000622
	142.	.9248	.09945	836.7	.000600		142.	.9302	.10073	849.8	.000611
	144.	.9133	.09712	809.2	.000588		144.	.9190	.09844	822.3	.000600
	146.	.9017	.09482	782.7	.000577		146.	.9077	.09617	795.9	.000588
	148.	.8898	.09257	757.1	.000566		148.	.8962	.09395	770.5	.000577
	150.	.8777	.09037	732.4	.000554		150.	.8845	.09178	745.9	.000567
	152.	.8654	.08825	708.5	.000544		152.	.8725	.08969	722.2	.000556
	154.	.8528	.08626	685.4	.000534		154.	.8604	.08771	699.3	.000547
	156.	.8400	.08411	663.1	.000523		156.	.8481	.08559	677.2	.000536
	158.	.8270	.08189	641.5	.000511		158.	.8355	.08341	655.8	.000525
	160.	.8136	.07973	620.6	.000500		160.	.8227	.08129	635.2	.000515
	165.	.7792	.07454	571.2	.000474		165.	.7898	.07619	586.4	.000490
	170.	.7431	.06969	525.6	.000451		170.	.7555	.07142	541.6	.000468
	175.	.7054	.06522	483.7	.000431		175.	.7199	.06700	500.4	.000449
	180.	.6664	.06117	445.4	.000418		180.	.6833	.06298	462.8	.000435
	185.	.6269	.05754	411.0	.000411		185.	.6460	.05936	428.8	.000427
	190.	.5876	.05433	380.8	.000413		190.	.6089	.05615	398.7	.000426
	195.	.5497	.05149	354.9	.000423		195.	.5727	.05331	372.5	.000433
	200.	.5142	.04898	333.4	.000442		200.	.5382	.05079	350.2	.000448
	210.	.4526	.04482	301.7	.000500		210.	.4770	.04660	316.3	.000496
	220.	.4035	.04171	281.6	.000574		220.	.4268	.04340	294.0	.000562
	230.	.3649	.03951	269.1	.000659		230.	.3865	.04104	279.6	.000638
	240.	.3341	.03803	261.5	.000749		240.	.3540	.03939	270.4	.000721
	250.	.3090	.03706	257.0	.000841		250.	.3275	.03826	264.8	.000807
	260.	.2882	.03646	254.7	.000935		260.	.3054	.03753	261.5	.000895
	270.	.2706	.03614	253.8	.001029		270.	.2866	.03709	259.9	.000984
	280.	.2555	.03600	254.0	.001125		280.	.2705	.03686	259.5	.001074
	290.	.2423	.03601	255.0	.001221		290.	.2564	.03678	260.0	.001165
	300.	.2307	.03612	256.6	.001317		300.	.2441	.03683	261.1	.001256
	310.	.2203	.03636	258.6	.001417		310.	.2330	.03701	262.8	.001350
	320.	.2110	.03681	260.9	.001523		320.	.2232	.03743	264.8	.001451

* Two Phase Boundary

Table 5. Transport Properties of Oxygen, Isobars, SI Units.

	19.0 MPa Isobar					20.0 MPa Isobar				
	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s
*	56.511	1.3181	.20814	5419.4	.000955	* 56.623	1.3187	.20838	5447.7	.000956
	58.	1.3119	.20559	5220.9	.000949	58.	1.3129	.20603	5262.1	.000950
	60.	1.3036	.20232	4960.6	.000941	60.	1.3047	.20277	4999.1	.000943
	62.	1.2953	.19922	4709.3	.000934	62.	1.2964	.19967	4745.4	.000936
	64.	1.2871	.19626	4468.2	.000928	64.	1.2882	.19672	4502.2	.000930
	66.	1.2788	.19341	4238.4	.000922	66.	1.2800	.19388	4270.4	.000924
	68.	1.2706	.19066	4020.1	.000916	68.	1.2719	.19115	4050.4	.000918
	70.	1.2624	.18800	3813.6	.000910	70.	1.2637	.18849	3842.3	.000912
	72.	1.2542	.18540	3618.6	.000905	72.	1.2555	.18590	3645.9	.000907
	74.	1.2459	.18285	3435.1	.000899	74.	1.2473	.18337	3461.0	.000902
	76.	1.2377	.18035	3262.4	.000894	76.	1.2391	.18088	3287.1	.000896
	78.	1.2294	.17788	3100.2	.000888	78.	1.2308	.17843	3123.8	.000891
	80.	1.2211	.17544	2948.0	.000883	80.	1.2226	.17600	2970.6	.000885
	82.	1.2128	.17303	2805.1	.000877	82.	1.2143	.17360	2826.8	.000880
	84.	1.2044	.17063	2671.2	.000871	84.	1.2060	.17121	2691.9	.000874
	86.	1.1960	.16824	2545.5	.000866	86.	1.1976	.16884	2565.5	.000869
	88.	1.1876	.16586	2427.6	.000860	88.	1.1893	.16648	2446.8	.000863
	90.	1.1791	.16349	2316.9	.000853	90.	1.1809	.16412	2335.5	.000857
	92.	1.1706	.16112	2213.0	.000847	92.	1.1724	.16177	2231.0	.000851
	94.	1.1621	.15875	2115.5	.000840	94.	1.1639	.15942	2132.8	.000844
	96.	1.1535	.15638	2023.7	.000834	96.	1.1554	.15706	2040.5	.000838
	98.	1.1449	.15401	1937.4	.000827	98.	1.1469	.15471	1953.8	.000831
	100.	1.1362	.15164	1856.2	.000820	100.	1.1383	.15236	1872.1	.000824
	102.	1.1275	.14926	1779.7	.000812	102.	1.1296	.15000	1795.1	.000816
	104.	1.1187	.14689	1707.5	.000804	104.	1.1209	.14764	1722.6	.000809
	106.	1.1098	.14451	1639.4	.000797	106.	1.1121	.14528	1654.2	.000801
	108.	1.1009	.14213	1575.1	.000788	108.	1.1033	.14292	1589.5	.000793
	110.	1.0919	.13974	1514.3	.000780	110.	1.0944	.14055	1528.4	.000785
	112.	1.0829	.13736	1456.7	.000772	112.	1.0855	.13819	1470.6	.000777
	114.	1.0738	.13497	1402.2	.000763	114.	1.0765	.13582	1415.8	.000768
	116.	1.0646	.13258	1350.4	.000754	116.	1.0674	.13345	1363.8	.000760
	118.	1.0553	.13019	1301.3	.000745	118.	1.0582	.13109	1314.5	.000751
	120.	1.0459	.12781	1254.7	.000735	120.	1.0489	.12872	1267.7	.000741
	122.	1.0364	.12542	1210.3	.000725	122.	1.0396	.12636	1223.1	.000732
	124.	1.0269	.12304	1168.0	.000716	124.	1.0302	.12401	1180.7	.000722
	126.	1.0172	.12066	1127.7	.000706	126.	1.0206	.12165	1140.3	.000713
	128.	1.0074	.11829	1089.2	.000695	128.	1.0110	.11931	1101.8	.000703
	130.	.9975	.11593	1052.5	.000685	130.	1.0013	.11697	1065.0	.000693
	132.	.9875	.11357	1017.4	.000675	132.	.9914	.11464	1029.8	.000683
	134.	.9774	.11122	983.7	.000664	134.	.9815	.11232	996.1	.000672
	136.	.9671	.10889	951.5	.000653	136.	.9714	.11001	963.9	.000662
	138.	.9567	.10656	920.6	.000642	138.	.9612	.10772	933.0	.000651
	140.	.9461	.10426	891.0	.000632	140.	.9508	.10544	903.4	.000641
	142.	.9354	.10197	862.5	.000621	142.	.9404	.10319	874.9	.000631
	144.	.9245	.09971	835.1	.000610	144.	.9297	.10095	847.6	.000620
	146.	.9135	.09748	808.8	.000599	146.	.9190	.09875	821.3	.000610
	148.	.9023	.09529	783.4	.000589	148.	.9080	.09659	796.0	.000600
	150.	.8909	.09315	759.0	.000578	150.	.8970	.09447	771.7	.000590
	152.	.8793	.09107	735.4	.000569	152.	.8857	.09242	748.2	.000580
	154.	.8676	.08911	712.7	.000559	154.	.8744	.09046	725.6	.000571
	156.	.8557	.08701	690.7	.000549	156.	.8628	.08840	703.8	.000561
	158.	.8435	.08488	669.6	.000539	158.	.8511	.08630	682.8	.000551
	160.	.8312	.08279	649.1	.000529	160.	.8392	.08424	662.4	.000542
	165.	.7996	.07778	600.9	.000505	165.	.8088	.07930	614.6	.000519
	170.	.7669	.07307	556.6	.000483	170.	.7773	.07466	570.8	.000498
	175.	.7330	.06870	516.0	.000465	175.	.7450	.07034	530.7	.000480
	180.	.6983	.06471	478.9	.000451	180.	.7119	.06637	494.1	.000466
	185.	.6631	.06110	445.4	.000442	185.	.6784	.06277	460.9	.000457
	190.	.6278	.05788	415.4	.000440	190.	.6448	.05955	431.0	.000453
	195.	.5932	.05503	389.0	.000444	195.	.6117	.05668	404.5	.000455
	200.	.5599	.05251	366.2	.000455	200.	.5796	.05414	381.4	.000463
	210.	.4995	.04829	330.7	.000495	210.	.5204	.04989	344.6	.000497
	220.	.4488	.04501	306.3	.000553	220.	.4696	.04655	318.6	.000548
	230.	.4073	.04254	290.1	.000623	230.	.4272	.04398	300.8	.000611
	240.	.3734	.04074	279.5	.000699	240.	.3922	.04206	288.8	.000682
	250.	.3455	.03947	272.7	.000779	250.	.3631	.04067	280.8	.000756
	260.	.3222	.03861	268.5	.000862	260.	.3386	.03969	275.6	.000834
	270.	.3023	.03806	266.2	.000946	270.	.3178	.03903	272.5	.000913
	280.	.2853	.03773	265.1	.001031	280.	.2998	.03861	270.9	.000993
	290.	.2704	.03757	265.1	.001117	290.	.2842	.03837	270.3	.001074
	300.	.2573	.03754	265.8	.001203	300.	.2704	.03827	270.6	.001156
	310.	.2456	.03767	267.1	.001292	310.	.2581	.03834	271.5	.001241
	320.	.2352	.03805	268.8	.001388	320.	.2470	.03868	272.9	.001332

* Two Phase Boundary

Table 5. Transport Properties of Oxygen, Isobars, SI Units.

	21.0 MPa Isobar					22.0 MPa Isobar				
	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s
*	56.734	1.3193	.20863	5475.8	.000957	* 56.845	1.3199	.20867	5503.8	.000958
	58.	1.3140	.20646	5303.5	.000952	58.	1.3151	.20690	5344.9	.000953
	60.	1.3058	.20321	5037.7	.000944	60.	1.3068	.20365	5076.5	.000946
	62.	1.2975	.20012	4781.6	.000938	62.	1.2987	.20057	4817.8	.000939
	64.	1.2894	.19718	4536.2	.000931	64.	1.2905	.19763	4570.3	.000933
	66.	1.2812	.19435	4302.5	.000925	66.	1.2824	.19482	4334.6	.000927
	68.	1.2731	.19162	4080.7	.000920	68.	1.2743	.19210	4111.1	.000922
	70.	1.2649	.18898	3871.0	.000914	70.	1.2662	.18947	3899.7	.000917
	72.	1.2568	.18640	3673.2	.000909	72.	1.2580	.18690	3700.4	.000911
	74.	1.2486	.18388	3486.9	.000904	74.	1.2499	.18439	3512.9	.000906
	76.	1.2404	.18141	3311.8	.000899	76.	1.2418	.18193	3336.5	.000901
	78.	1.2322	.17897	3147.4	.000893	78.	1.2336	.17950	3171.0	.000896
	80.	1.2240	.17656	2993.1	.000888	80.	1.2255	.17711	3015.7	.000891
	82.	1.2158	.17417	2848.4	.000883	82.	1.2173	.17473	2870.0	.000886
	84.	1.2075	.17180	2712.7	.000877	84.	1.2091	.17238	2733.4	.000880
	86.	1.1993	.16944	2585.4	.000872	86.	1.2008	.17004	2605.3	.000875
	88.	1.1909	.16709	2466.0	.000866	88.	1.1926	.16770	2485.2	.000869
	90.	1.1826	.16475	2354.0	.000860	90.	1.1843	.16538	2372.5	.000863
	92.	1.1742	.16241	2248.8	.000854	92.	1.1760	.16305	2266.7	.000857
	94.	1.1658	.16008	2150.1	.000848	94.	1.1676	.16073	2167.3	.000851
	96.	1.1573	.15774	2057.3	.000841	96.	1.1592	.15841	2074.0	.000845
	98.	1.1488	.15541	1970.0	.000835	98.	1.1508	.15609	1986.2	.000839
	100.	1.1403	.15307	1887.9	.000828	100.	1.1423	.15377	1903.6	.000832
	102.	1.1317	.15073	1810.5	.000821	102.	1.1338	.15145	1825.8	.000825
	104.	1.1231	.14839	1737.6	.000813	104.	1.1253	.14913	1752.5	.000818
	106.	1.1144	.14605	1668.8	.000806	106.	1.1166	.14680	1683.3	.000810
	108.	1.1057	.14370	1603.8	.000798	108.	1.1080	.14448	1618.0	.000803
	110.	1.0969	.14136	1542.4	.000790	110.	1.0993	.14215	1556.3	.000795
	112.	1.0880	.13901	1484.3	.000782	112.	1.0905	.13982	1497.9	.000787
	114.	1.0791	.13666	1429.3	.000774	114.	1.0817	.13749	1442.6	.000779
	116.	1.0701	.13432	1377.1	.000765	116.	1.0728	.13517	1390.3	.000771
	118.	1.0610	.13197	1327.6	.000756	118.	1.0638	.13284	1340.6	.000762
	120.	1.0519	.12963	1280.6	.000747	120.	1.0548	.13052	1293.3	.000753
	122.	1.0427	.12729	1235.9	.000738	122.	1.0457	.12820	1248.5	.000745
	124.	1.0334	.12495	1193.3	.000729	124.	1.0365	.12589	1205.8	.000735
	126.	1.0240	.12263	1152.8	.000720	126.	1.0273	.12358	1165.1	.000726
	128.	1.0145	.12030	1114.2	.000710	128.	1.0179	.12128	1126.4	.000717
	130.	1.0049	.11799	1077.3	.000700	130.	1.0085	.11899	1089.4	.000707
	132.	.9953	.11568	1042.0	.000690	132.	.9990	.11671	1054.1	.000698
	134.	.9855	.11339	1008.3	.000680	134.	.9893	.11444	1020.3	.000688
	136.	.9756	.11111	976.1	.000670	136.	.9796	.11219	988.0	.000678
	138.	.9656	.10884	945.2	.000660	138.	.9698	.10995	957.1	.000669
	140.	.9554	.10659	915.5	.000650	140.	.9598	.10772	927.5	.000659
	142.	.9452	.10437	887.1	.000640	142.	.9498	.10552	899.0	.000649
	144.	.9348	.10216	859.8	.000630	144.	.9396	.10334	871.7	.000639
	146.	.9243	.09999	833.6	.000620	146.	.9293	.10119	845.5	.000629
	148.	.9136	.09785	808.3	.000610	148.	.9189	.09908	820.3	.000620
	150.	.9028	.09575	784.1	.000600	150.	.9084	.09700	796.1	.000611
	152.	.8919	.09372	760.7	.000591	152.	.8977	.09499	772.8	.000601
	154.	.8808	.09178	738.1	.000582	154.	.8869	.09306	750.3	.000593
	156.	.8696	.08974	716.4	.000573	156.	.8760	.09104	728.7	.000584
	158.	.8582	.08767	695.5	.000563	158.	.8650	.08900	707.8	.000574
	160.	.8467	.08565	675.3	.000554	160.	.8538	.08701	687.7	.000565
	165.	.8173	.08078	627.8	.000532	165.	.8254	.08220	640.5	.000544
	170.	.7871	.07619	584.4	.000512	170.	.7961	.07767	597.4	.000525
	175.	.7560	.07191	544.6	.000495	175.	.7663	.07343	557.9	.000508
	180.	.7244	.06797	508.4	.000481	180.	.7358	.06952	522.0	.000495
	185.	.6923	.06439	475.4	.000471	185.	.7051	.06594	489.3	.000485
	190.	.6602	.06115	445.8	.000466	190.	.6743	.06271	459.7	.000479
	195.	.6285	.05827	419.2	.000467	195.	.6438	.05981	433.2	.000478
	200.	.5975	.05571	395.9	.000472	200.	.6139	.05722	409.7	.000482
	210.	.5397	.05141	358.1	.000500	210.	.5575	.05288	371.1	.000505
	220.	.4891	.04803	330.6	.000545	220.	.5074	.04945	342.4	.000545
	230.	.4462	.04538	311.4	.000603	230.	.4642	.04674	321.8	.000597
	240.	.4102	.04336	298.0	.000668	240.	.4276	.04463	307.3	.000657
	250.	.3801	.04186	288.9	.000737	250.	.3966	.04303	297.1	.000722
	260.	.3547	.04077	282.9	.000810	260.	.3703	.04184	290.2	.000790
	270.	.3329	.04000	279.0	.000885	270.	.3477	.04098	285.5	.000861
	280.	.3141	.03949	276.7	.000961	280.	.3282	.04038	282.6	.000932
	290.	.2977	.03917	275.6	.001038	290.	.3110	.03998	281.0	.001005
	300.	.2832	.03900	275.4	.001115	300.	.2959	.03974	280.4	.001079
	310.	.2703	.03902	275.9	.001195	310.	.2824	.03970	280.5	.001155
	320.	.2588	.03931	277.0	.001283	320.	.2704	.03996	281.2	.001239

* Two Phase Boundary

Table 5. Transport Properties of Oxygen, Isobars, SI Units.

	23.0 MPa Isobar					24.0 MPa Isobar				
	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s
*	56.956	1.3205	.20911	5531.6	.000959	* 57.067	1.3211	.20935	5559.3	.000960
	58.	1.3161	.20734	5386.5	.000955	58.	1.3172	.20777	5428.3	.000956
	60.	1.3079	.20409	5115.3	.000947	60.	1.3090	.20453	5154.2	.000949
	62.	1.2998	.20102	4854.2	.000941	62.	1.3009	.20146	4890.6	.000943
	64.	1.2916	.19809	4604.5	.000935	64.	1.2928	.19854	4638.7	.000937
	66.	1.2835	.19528	4366.8	.000929	66.	1.2847	.19574	4399.0	.000931
	68.	1.2755	.19258	4141.5	.000924	68.	1.2766	.19305	4171.9	.000926
	70.	1.2674	.18995	3928.5	.000919	70.	1.2686	.19043	3957.3	.000921
	72.	1.2593	.18740	3727.7	.000914	72.	1.2606	.18789	3755.0	.000916
	74.	1.2512	.18490	3538.8	.000909	74.	1.2525	.18541	3564.7	.000911
	76.	1.2431	.18245	3361.3	.000904	76.	1.2445	.18297	3386.0	.000906
	78.	1.2350	.18004	3194.6	.000899	78.	1.2364	.18057	3218.1	.000901
	80.	1.2269	.17766	3038.2	.000893	80.	1.2283	.17820	3060.7	.000896
	82.	1.2188	.17530	2891.6	.000888	82.	1.2202	.17585	2913.1	.000891
	84.	1.2106	.17295	2754.1	.000883	84.	1.2121	.17353	2774.7	.000886
	86.	1.2024	.17063	2625.2	.000878	86.	1.2040	.17121	2645.0	.000881
	88.	1.1942	.16831	2504.3	.000872	88.	1.1958	.16891	2523.4	.000875
	90.	1.1860	.16600	2390.9	.000867	90.	1.1876	.16661	2409.3	.000870
	92.	1.1777	.16369	2284.4	.000861	92.	1.1794	.16432	2302.2	.000864
	94.	1.1694	.16138	2184.5	.000855	94.	1.1712	.16203	2201.7	.000858
	96.	1.1611	.15908	2090.6	.000849	96.	1.1629	.15974	2107.2	.000852
	98.	1.1527	.15678	2002.3	.000842	98.	1.1546	.15745	2018.4	.000846
	100.	1.1443	.15447	1919.3	.000836	100.	1.1463	.15517	1934.9	.000840
	102.	1.1359	.15217	1841.0	.000829	102.	1.1379	.15288	1856.2	.000833
	104.	1.1274	.14986	1767.3	.000822	104.	1.1295	.15059	1782.1	.000826
	106.	1.1189	.14755	1697.8	.000815	106.	1.1210	.14830	1712.2	.000819
	108.	1.1103	.14524	1632.2	.000808	108.	1.1125	.14600	1646.2	.000812
	110.	1.1017	.14293	1570.1	.000800	110.	1.1040	.14371	1583.9	.000805
	112.	1.0930	.14062	1511.5	.000792	112.	1.0954	.14142	1524.9	.000797
	114.	1.0842	.13832	1455.9	.000784	114.	1.0867	.13913	1469.1	.000789
	116.	1.0754	.13601	1403.3	.000776	116.	1.0780	.13684	1416.3	.000781
	118.	1.0666	.13370	1353.4	.000768	118.	1.0693	.13455	1366.1	.000773
	120.	1.0577	.13140	1306.0	.000759	120.	1.0605	.13227	1318.5	.000765
	122.	1.0487	.12910	1261.0	.000751	122.	1.0516	.12999	1273.3	.000756
	124.	1.0396	.12681	1218.1	.000742	124.	1.0426	.12772	1230.3	.000748
	126.	1.0305	.12452	1177.3	.000733	126.	1.0336	.12545	1189.4	.000739
	128.	1.0213	.12225	1138.5	.000724	128.	1.0245	.12319	1150.4	.000730
	130.	1.0120	.11998	1101.4	.000714	130.	1.0154	.12095	1113.2	.000721
	132.	1.0026	.11772	1066.0	.000705	132.	1.0061	.11871	1077.7	.000712
	134.	.9931	.11547	1032.1	.000696	134.	.9968	.11649	1043.8	.000703
	136.	.9835	.11324	999.8	.000686	136.	.9874	.11428	1011.4	.000694
	138.	.9739	.11102	968.8	.000677	138.	.9779	.11208	980.3	.000685
	140.	.9641	.10883	939.1	.000667	140.	.9683	.10990	950.6	.000675
	142.	.9543	.10665	910.7	.000658	142.	.9586	.10775	922.2	.000666
	144.	.9443	.10449	883.4	.000648	144.	.9488	.10562	894.9	.000657
	146.	.9342	.10237	857.2	.000639	146.	.9390	.10351	868.6	.000648
	148.	.9240	.10027	832.0	.000629	148.	.9290	.10144	843.5	.000639
	150.	.9138	.09822	807.8	.000620	150.	.9189	.09941	819.3	.000630
	152.	.9033	.09623	784.5	.000612	152.	.9087	.09743	796.0	.000621
	154.	.8928	.09431	762.1	.000603	154.	.8985	.09552	773.6	.000613
	156.	.8822	.09231	740.5	.000594	156.	.8881	.09355	752.1	.000604
	158.	.8714	.09030	719.8	.000585	158.	.8776	.09156	731.4	.000596
	160.	.8606	.08833	699.7	.000577	160.	.8670	.08962	711.4	.000587
	165.	.8329	.08358	652.7	.000556	165.	.8401	.08492	664.6	.000567
	170.	.8047	.07910	609.8	.000537	170.	.8127	.08040	621.9	.000549
	175.	.7758	.07490	570.7	.000521	175.	.7848	.07633	582.9	.000533
	180.	.7465	.07102	534.9	.000508	180.	.7564	.07246	547.3	.000520
	185.	.7169	.06745	502.4	.000498	185.	.7279	.06891	514.9	.000510
	190.	.6873	.06421	472.9	.000491	190.	.6993	.06567	485.6	.000503
	195.	.6578	.06130	446.5	.000489	195.	.6709	.06274	459.1	.000500
	200.	.6290	.05869	422.8	.000492	200.	.6429	.06012	435.4	.000502
	210.	.5740	.05430	383.6	.000511	210.	.5894	.05568	395.6	.000517
	220.	.5245	.05082	354.0	.000546	220.	.5406	.05214	365.2	.000548
	230.	.4813	.04805	332.2	.000593	230.	.4975	.04932	342.4	.000591
	240.	.4442	.04587	316.5	.000648	240.	.4602	.04708	325.7	.000642
	250.	.4126	.04418	305.4	.000709	250.	.4280	.04531	313.6	.000699
	260.	.3855	.04290	297.5	.000773	260.	.4003	.04395	304.9	.000759
	270.	.3622	.04195	292.2	.000840	270.	.3763	.04292	298.8	.000822
	280.	.3419	.04127	288.6	.000908	280.	.3553	.04216	294.7	.000887
	290.	.3241	.04080	286.5	.000977	290.	.3369	.04161	292.0	.000952
	300.	.3084	.04049	285.4	.001047	300.	.3207	.04124	290.5	.001019
	310.	.2944	.04039	285.1	.001120	310.	.3061	.04108	289.8	.001089
	320.	.2818	.04060	285.5	.001200	320.	.2930	.04125	289.9	.001165

* Two Phase Boundary

Table 5. Transport Properties of Oxygen, Isobars, SI Units.

	25.0 MPa Isobar					26.0 MPa Isobar				
	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s
*	57.178	1.3216	.20959	5586.8	.000960	* 57.288	1.3222	.20983	5614.1	.000961
	58.	1.3183	.20820	5470.1	.000957	58.	1.3193	.20863	5512.1	.000959
	60.	1.3101	.20497	5193.2	.000950	60.	1.3111	.20540	5232.3	.000952
	62.	1.3020	.20191	4927.1	.000944	62.	1.3030	.20235	4963.7	.000946
	64.	1.2939	.19899	4672.9	.000938	64.	1.2950	.19944	4707.3	.000940
	66.	1.2858	.19620	4431.3	.000933	66.	1.2870	.19666	4463.6	.000935
	68.	1.2778	.19352	4202.3	.000928	68.	1.2790	.19398	4232.8	.000930
	70.	1.2698	.19091	3986.1	.000923	70.	1.2710	.19139	4014.9	.000925
	72.	1.2618	.18838	3782.4	.000918	72.	1.2631	.18887	3809.7	.000920
	74.	1.2538	.18591	3590.7	.000913	74.	1.2551	.18641	3616.7	.000915
	76.	1.2458	.18349	3410.7	.000908	76.	1.2471	.18400	3435.4	.000911
	78.	1.2378	.18110	3241.7	.000904	78.	1.2391	.18162	3265.2	.000906
	80.	1.2297	.17874	3083.2	.000899	80.	1.2311	.17928	3105.7	.000901
	82.	1.2217	.17641	2934.7	.000894	82.	1.2231	.17696	2956.2	.000896
	84.	1.2136	.17409	2795.4	.000889	84.	1.2151	.17466	2816.0	.000892
	86.	1.2055	.17180	2664.8	.000884	86.	1.2071	.17237	2684.6	.000887
	88.	1.1974	.16951	2542.4	.000878	88.	1.1990	.17010	2561.4	.000881
	90.	1.1893	.16722	2427.6	.000873	90.	1.1909	.16783	2445.9	.000876
	92.	1.1811	.16495	2319.9	.000867	92.	1.1828	.16557	2337.5	.000871
	94.	1.1730	.16267	2218.7	.000862	94.	1.1747	.16331	2235.8	.000865
	96.	1.1647	.16040	2123.7	.000856	96.	1.1665	.16105	2140.2	.000859
	98.	1.1565	.15813	2034.4	.000850	98.	1.1584	.15879	2050.4	.000853
	100.	1.1482	.15585	1950.4	.000844	100.	1.1501	.15653	1965.9	.000847
	102.	1.1399	.15358	1871.3	.000837	102.	1.1419	.15428	1886.4	.000841
	104.	1.1316	.15131	1796.8	.000830	104.	1.1336	.15202	1811.4	.000835
	106.	1.1232	.14903	1726.5	.000824	106.	1.1253	.14976	1740.8	.000828
	108.	1.1148	.14675	1660.2	.000817	108.	1.1169	.14750	1674.1	.000821
	110.	1.1063	.14448	1597.5	.000809	110.	1.1086	.14524	1611.1	.000814
	112.	1.0978	.14220	1538.3	.000802	112.	1.1001	.14298	1551.6	.000807
	114.	1.0892	.13993	1482.2	.000794	114.	1.0916	.14072	1495.2	.000799
	116.	1.0806	.13766	1429.1	.000787	116.	1.0831	.13847	1441.9	.000792
	118.	1.0719	.13539	1378.8	.000779	118.	1.0745	.13622	1391.3	.000784
	120.	1.0632	.13313	1331.0	.000771	120.	1.0659	.13397	1343.3	.000776
	122.	1.0544	.13087	1285.6	.000762	122.	1.0572	.13173	1297.7	.000768
	124.	1.0456	.12861	1242.4	.000754	124.	1.0485	.12949	1254.3	.000760
	126.	1.0367	.12637	1201.3	.000745	126.	1.0397	.12727	1213.1	.000751
	128.	1.0277	.12413	1162.2	.000737	128.	1.0308	.12505	1173.8	.000743
	130.	1.0187	.12190	1124.9	.000728	130.	1.0219	.12284	1136.4	.000734
	132.	1.0096	.11968	1089.3	.000719	132.	1.0129	.12064	1100.7	.000726
	134.	1.0004	.11748	1055.3	.000710	134.	1.0039	.11846	1066.6	.000717
	136.	.9911	.11529	1022.8	.000701	136.	.9947	.11629	1034.0	.000708
	138.	.9819	.11312	991.7	.000692	138.	.9855	.11414	1002.9	.000700
	140.	.9723	.11096	961.9	.000683	140.	.9763	.11200	973.1	.000691
	142.	.9628	.10883	933.4	.000674	142.	.9669	.10989	944.5	.000682
	144.	.9532	.10672	906.1	.000665	144.	.9575	.10780	917.1	.000673
	146.	.9435	.10464	879.9	.000656	146.	.9480	.10573	890.9	.000665
	148.	.9338	.10258	854.7	.000647	148.	.9384	.10370	865.7	.000656
	150.	.9239	.10057	830.5	.000639	150.	.9287	.10170	841.5	.000648
	152.	.9139	.09861	807.3	.000630	152.	.9189	.09976	818.2	.000639
	154.	.9039	.09671	784.9	.000623	154.	.9091	.09787	795.9	.000632
	156.	.8937	.09476	763.4	.000614	156.	.8992	.09594	774.4	.000624
	158.	.8835	.09279	742.7	.000606	158.	.8891	.09400	753.7	.000615
	160.	.8732	.09087	722.7	.000597	160.	.8791	.09209	733.8	.000607
	165.	.8470	.08623	676.0	.000578	165.	.8535	.08750	687.2	.000588
	170.	.8203	.08184	633.5	.000560	170.	.8275	.08315	644.7	.000571
	175.	.7932	.07771	594.6	.000545	175.	.8012	.07905	606.0	.000556
	180.	.7657	.07387	559.2	.000532	180.	.7745	.07524	570.7	.000543
	185.	.7381	.07033	527.0	.000522	185.	.7477	.07171	538.5	.000533
	190.	.7104	.06709	497.7	.000515	190.	.7209	.06847	509.3	.000526
	195.	.6829	.06415	471.2	.000511	195.	.6942	.06552	482.8	.000522
	200.	.6558	.06151	447.4	.000512	200.	.6679	.06286	459.0	.000521
	210.	.6037	.05702	407.3	.000524	210.	.6171	.05833	418.5	.000531
	220.	.5558	.05343	376.1	.000551	220.	.5700	.05469	386.6	.000555
	230.	.5129	.05056	352.4	.000590	230.	.5275	.05176	362.2	.000590
	240.	.4754	.04826	334.7	.000637	240.	.4900	.04941	343.7	.000634
	250.	.4428	.04643	321.7	.000690	250.	.4571	.04752	329.9	.000684
	260.	.4146	.04499	312.3	.000747	260.	.4284	.04601	319.6	.000737
	270.	.3900	.04388	305.5	.000807	270.	.4033	.04484	312.2	.000794
	280.	.3685	.04305	300.8	.000868	280.	.3813	.04393	306.9	.000852
	290.	.3495	.04243	297.6	.000931	290.	.3618	.04325	303.2	.000912
	300.	.3327	.04199	295.6	.000994	300.	.3445	.04274	300.7	.000972
	310.	.3176	.04177	294.5	.001061	310.	.3290	.04247	299.3	.001035
	320.	.3041	.04190	294.3	.001134	320.	.3150	.04255	298.7	.001106

* Two Phase Boundary

Table 5. Transport Properties of Oxygen, Isobars, SI Units.

	27.0 MPa Isobar					28.0 MPa Isobar				
	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s
*	57.399	1.3228	.21007	5641.2	.000962	* 57.509	1.3234	.21031	5668.2	.000963
	58.	1.3203	.20906	5554.2	.000960	58.	1.3214	.20949	5596.4	.000961
	60.	1.3122	.20583	5271.5	.000953	60.	1.3133	.20627	5310.8	.000955
	62.	1.3041	.20279	5000.3	.000947	62.	1.3052	.20323	5037.1	.000949
	64.	1.2961	.19989	4741.6	.000942	64.	1.2972	.20034	4776.1	.000943
	66.	1.2881	.19712	4495.9	.000936	66.	1.2892	.19757	4528.3	.000938
	68.	1.2802	.19445	4263.3	.000932	68.	1.2813	.19491	4293.9	.000933
	70.	1.2722	.19187	4043.8	.000927	70.	1.2734	.19234	4072.7	.000929
	72.	1.2643	.18936	3837.0	.000922	72.	1.2655	.18984	3864.4	.000924
	74.	1.2564	.18691	3642.6	.000918	74.	1.2576	.18741	3668.6	.000920
	76.	1.2484	.18451	3460.0	.000913	76.	1.2497	.18502	3484.7	.000915
	78.	1.2405	.18215	3288.8	.000908	78.	1.2418	.18267	3312.3	.000911
	80.	1.2325	.17981	3128.2	.000904	80.	1.2339	.18035	3150.6	.000906
	82.	1.2246	.17751	2977.7	.000899	82.	1.2260	.17805	2999.1	.000902
	84.	1.2166	.17522	2836.6	.000894	84.	1.2180	.17578	2857.2	.000897
	86.	1.2086	.17295	2704.4	.000889	86.	1.2101	.17352	2724.1	.000892
	88.	1.2006	.17069	2580.4	.000884	88.	1.2021	.17127	2599.4	.000887
	90.	1.1925	.16843	2464.2	.000879	90.	1.1941	.16903	2482.4	.000882
	92.	1.1845	.16618	2355.2	.000874	92.	1.1861	.16680	2372.7	.000877
	94.	1.1764	.16394	2252.8	.000868	94.	1.1781	.16457	2269.8	.000872
	96.	1.1683	.16170	2156.7	.000863	96.	1.1701	.16234	2173.1	.000866
	98.	1.1602	.15945	2066.3	.000857	98.	1.1620	.16011	2082.2	.000861
	100.	1.1520	.15721	1981.3	.000851	100.	1.1539	.15788	1996.7	.000855
	102.	1.1439	.15497	1901.4	.000845	102.	1.1458	.15565	1916.3	.000849
	104.	1.1356	.15272	1826.0	.000839	104.	1.1376	.15342	1840.5	.000842
	106.	1.1274	.15048	1755.0	.000832	106.	1.1295	.15120	1769.1	.000836
	108.	1.1191	.14824	1687.9	.000825	108.	1.1212	.14897	1701.7	.000830
	110.	1.1108	.14599	1624.6	.000818	110.	1.1130	.14674	1638.1	.000823
	112.	1.1024	.14375	1564.8	.000811	112.	1.1047	.14451	1577.9	.000816
	114.	1.0940	.14151	1508.2	.000804	114.	1.0964	.14229	1521.0	.000809
	116.	1.0856	.13927	1454.5	.000797	116.	1.0880	.14006	1467.1	.000801
	118.	1.0771	.13704	1403.7	.000789	118.	1.0796	.13785	1416.1	.000794
	120.	1.0686	.13481	1355.5	.000781	120.	1.0712	.13563	1367.6	.000786
	122.	1.0600	.13258	1309.7	.000773	122.	1.0627	.13342	1321.6	.000779
	124.	1.0513	.13036	1266.2	.000765	124.	1.0541	.13122	1277.9	.000771
	126.	1.0426	.12815	1224.8	.000757	126.	1.0455	.12903	1236.4	.000763
	128.	1.0339	.12595	1185.4	.000749	128.	1.0369	.12685	1196.8	.000755
	130.	1.0251	.12376	1147.8	.000741	130.	1.0282	.12467	1159.1	.000747
	132.	1.0162	.12159	1112.0	.000732	132.	1.0194	.12251	1123.2	.000739
	134.	1.0073	.11942	1077.8	.000724	134.	1.0106	.12037	1088.9	.000730
	136.	.9983	.11727	1045.1	.000715	136.	1.0017	.11823	1056.1	.000722
	138.	.9892	.11514	1013.9	.000707	138.	.9928	.11612	1024.8	.000714
	140.	.9801	.11302	984.0	.000698	140.	.9838	.11402	994.8	.000705
	142.	.9709	.11093	955.4	.000690	142.	.9747	.11195	966.1	.000697
	144.	.9616	.10885	928.0	.000681	144.	.9656	.10989	938.7	.000689
	146.	.9522	.10681	901.7	.000673	146.	.9564	.10786	912.3	.000680
	148.	.9428	.10479	876.5	.000664	148.	.9471	.10587	887.1	.000672
	150.	.9333	.10282	852.3	.000656	150.	.9378	.10390	862.8	.000664
	152.	.9238	.10088	829.0	.000648	152.	.9284	.10198	839.6	.000657
	154.	.9141	.09901	806.6	.000641	154.	.9190	.10012	817.2	.000649
	156.	.9044	.09709	785.2	.000633	156.	.9094	.09822	795.7	.000641
	158.	.8946	.09517	764.5	.000625	158.	.8998	.09632	775.0	.000634
	160.	.8847	.09328	744.6	.000617	160.	.8902	.09445	755.1	.000626
	165.	.8598	.08873	698.0	.000598	165.	.8658	.08994	708.6	.000608
	170.	.8344	.08442	655.6	.000582	170.	.8410	.08567	666.2	.000591
	175.	.8087	.08036	617.0	.000567	175.	.8159	.08163	627.6	.000577
	180.	.7828	.07657	581.7	.000554	180.	.7907	.07786	592.4	.000564
	185.	.7568	.07305	549.6	.000544	185.	.7653	.07436	560.4	.000554
	190.	.7307	.06981	520.5	.000536	190.	.7400	.07113	531.2	.000547
	195.	.7048	.06686	494.0	.000532	195.	.7148	.06817	504.8	.000542
	200.	.6792	.06419	470.1	.000531	200.	.6899	.06548	480.8	.000540
	210.	.6297	.05961	429.3	.000539	210.	.6415	.06086	439.7	.000547
	220.	.5834	.05592	396.9	.000560	220.	.5961	.05712	406.9	.000565
	230.	.5414	.05294	371.7	.000592	230.	.5545	.05409	381.1	.000594
	240.	.5039	.05053	352.5	.000632	240.	.5172	.05163	361.1	.000631
	250.	.4708	.04858	337.9	.000679	250.	.4840	.04964	345.8	.000675
	260.	.4418	.04702	327.0	.000729	260.	.4547	.04802	334.2	.000723
	270.	.4163	.04578	318.9	.000783	270.	.4288	.04672	325.5	.000773
	280.	.3938	.04481	313.0	.000838	280.	.4059	.04568	319.1	.000826
	290.	.3738	.04406	308.8	.000895	290.	.3855	.04487	314.4	.000880
	300.	.3560	.04350	305.9	.000953	300.	.3673	.04425	311.1	.000935
	310.	.3401	.04317	304.1	.001013	310.	.3510	.04387	308.9	.000993
	320.	.3257	.04321	303.2	.001081	320.	.3362	.04387	307.7	.001058

* Two Phase Boundary

Table 5. Transport Properties of Oxygen, Isobars, SI Units.

	29.0 MPa Isobar					30.0 MPa Isobar				
	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s		Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s
*	57.619	1.3240	.21055	5595.0	.000963	*	57.729	1.3245	.21079	5721.6	.000964
	58.	1.3224	.20991	5638.7	.000962		58.	1.3234	.21034	5681.2	.000963
	60.	1.3143	.20670	5350.2	.000956		60.	1.3153	.20713	5389.6	.000957
	62.	1.3063	.20366	5073.8	.000950		62.	1.3073	.20410	5110.7	.000952
	64.	1.2983	.20078	4810.6	.000945		64.	1.2994	.20122	4845.1	.000946
	66.	1.2904	.19802	4560.7	.000940		66.	1.2915	.19847	4593.2	.000942
	68.	1.2825	.19537	4324.4	.000935		68.	1.2836	.19583	4355.0	.000937
	70.	1.2746	.19281	4101.5	.000931		70.	1.2758	.19328	4130.5	.000933
	72.	1.2667	.19033	3891.7	.000926		72.	1.2679	.19081	3919.1	.000928
	74.	1.2589	.18790	3694.5	.000922		74.	1.2601	.18839	3720.5	.000924
	76.	1.2510	.18552	3509.4	.000918		76.	1.2523	.18602	3534.1	.000920
	78.	1.2431	.18318	3335.8	.000913		78.	1.2444	.18370	3359.3	.000916
	80.	1.2353	.18088	3173.1	.000909		80.	1.2366	.18140	3195.5	.000911
	82.	1.2274	.17860	3020.6	.000904		82.	1.2288	.17913	3042.0	.000907
	84.	1.2195	.17633	2877.7	.000900		84.	1.2209	.17689	2898.2	.000902
	86.	1.2116	.17409	2743.8	.000895		86.	1.2131	.17465	2763.5	.000898
	88.	1.2037	.17185	2618.3	.000890		88.	1.2052	.17243	2637.2	.000893
	90.	1.1957	.16963	2500.6	.000885		90.	1.1973	.17022	2518.8	.000888
	92.	1.1878	.16741	2390.3	.000880		92.	1.1894	.16801	2407.8	.000883
	94.	1.1798	.16519	2286.7	.000875		94.	1.1815	.16581	2303.6	.000878
	96.	1.1718	.16297	2189.4	.000870		96.	1.1735	.16361	2205.7	.000873
	98.	1.1638	.16076	2098.0	.000864		98.	1.1656	.16141	2113.8	.000868
	100.	1.1558	.15855	2012.1	.000858		100.	1.1576	.15921	2027.3	.000862
	102.	1.1477	.15633	1931.2	.000852		102.	1.1496	.15701	1946.0	.000856
	104.	1.1396	.15412	1855.0	.000846		104.	1.1416	.15481	1869.4	.000850
	106.	1.1315	.15190	1783.2	.000840		106.	1.1335	.15261	1797.2	.000844
	108.	1.1233	.14969	1715.4	.000834		108.	1.1254	.15041	1729.0	.000838
	110.	1.1152	.14748	1651.4	.000827		110.	1.1173	.14821	1664.7	.000831
	112.	1.1069	.14527	1591.0	.000820		112.	1.1092	.14601	1604.0	.000825
	114.	1.0987	.14306	1533.8	.000813		114.	1.1010	.14382	1546.5	.000818
	116.	1.0904	.14085	1479.6	.000806		116.	1.0928	.14163	1492.1	.000811
	118.	1.0821	.13865	1428.3	.000799		118.	1.0845	.13944	1440.5	.000804
	120.	1.0737	.13645	1379.7	.000792		120.	1.0762	.13726	1391.6	.000797
	122.	1.0653	.13426	1333.5	.000784		122.	1.0679	.13508	1345.2	.000789
	124.	1.0569	.13207	1289.6	.000776		124.	1.0596	.13291	1301.1	.000782
	126.	1.0484	.12990	1247.8	.000769		126.	1.0511	.13075	1259.2	.000774
	128.	1.0398	.12773	1208.1	.000761		128.	1.0427	.12860	1219.3	.000766
	130.	1.0312	.12557	1170.3	.000753		130.	1.0342	.12646	1181.3	.000759
	132.	1.0226	.12343	1134.2	.000745		132.	1.0257	.12433	1145.1	.000751
	134.	1.0139	.12130	1099.8	.000737		134.	1.0171	.12222	1110.6	.000743
	136.	1.0051	.11918	1066.9	.000729		136.	1.0084	.12012	1077.6	.000735
	138.	.9963	.11709	1035.5	.000720		138.	.9997	.11804	1046.1	.000727
	140.	.9874	.11501	1005.5	.000712		140.	.9910	.11598	1016.0	.000719
	142.	.9785	.11295	976.7	.000704		142.	.9822	.11393	987.2	.000711
	144.	.9695	.11091	949.2	.000696		144.	.9733	.11191	959.6	.000703
	146.	.9605	.10890	922.8	.000688		146.	.9644	.10992	933.1	.000695
	148.	.9513	.10692	897.5	.000680		148.	.9554	.10795	907.8	.000688
	150.	.9422	.10497	873.2	.000672		150.	.9464	.10602	883.4	.000680
	152.	.9329	.10306	849.9	.000665		152.	.9373	.10412	860.1	.000673
	154.	.9237	.10121	827.5	.000657		154.	.9282	.10228	837.7	.000665
	156.	.9143	.09933	806.0	.000650		156.	.9190	.10041	816.1	.000658
	158.	.9049	.09744	785.3	.000642		158.	.9098	.09854	795.4	.000651
	160.	.8954	.09559	765.4	.000635		160.	.9005	.09671	775.5	.000643
	165.	.8715	.09112	718.9	.000617		165.	.8770	.09228	729.0	.000626
	170.	.8473	.08688	676.5	.000601		170.	.8533	.08807	686.6	.000610
	175.	.8228	.08288	638.0	.000587		175.	.8294	.08409	648.1	.000596
	180.	.7982	.07912	602.8	.000574		180.	.8053	.08036	612.9	.000584
	185.	.7735	.07563	570.8	.000564		185.	.7812	.07688	580.9	.000574
	190.	.7488	.07241	541.7	.000557		190.	.7571	.07366	551.8	.000566
	195.	.7242	.06945	515.2	.000552		195.	.7331	.07069	525.2	.000561
	200.	.6999	.06675	491.1	.000550		200.	.7094	.06799	501.2	.000559
	210.	.6527	.06209	449.8	.000554		210.	.6632	.06329	459.6	.000562
	220.	.6081	.05830	416.6	.000570		220.	.6195	.05946	426.0	.000576
	230.	.5670	.05522	390.2	.000597		230.	.5789	.05633	399.1	.000600
	240.	.5299	.05272	369.6	.000632		240.	.5420	.05378	377.9	.000632
	250.	.4967	.05067	353.7	.000672		250.	.5089	.05168	361.4	.000671
	260.	.4672	.04900	341.4	.000717		260.	.4792	.04996	348.6	.000713
	270.	.4410	.04764	332.2	.000765		270.	.4528	.04855	338.7	.000759
	280.	.4177	.04655	325.2	.000816		280.	.4292	.04741	331.3	.000807
	290.	.3970	.04568	320.0	.000867		290.	.4082	.04649	325.7	.000856
	300.	.3784	.04500	316.3	.000920		300.	.3892	.04576	321.6	.000906
	310.	.3617	.04457	313.8	.000975		310.	.3722	.04527	318.6	.000959
	320.	.3466	.04452	312.2	.001038		320.	.3567	.04518	316.7	.001019

* Two Phase Boundary

Table 5. Transport Properties of Oxygen, Isobars, SI Units.

	35.0 MPa Isobar					40.0 MPa Isobar				
	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s
*	58.276	1.3274	.21199	5852.2	.000968	* 58.819	1.3302	.21318	5978.5	.000971
	60.	1.3205	.20925	5588.5	.000963	60.	1.3255	.21133	5789.8	.000969
	62.	1.3126	.20625	5296.2	.000959	62.	1.3176	.20835	5483.5	.000965
	64.	1.3047	.20340	5018.7	.000954	64.	1.3099	.20554	5193.7	.000961
	66.	1.2969	.20069	4756.2	.000950	66.	1.3022	.20287	4920.3	.000957
	68.	1.2892	.19810	4508.5	.000946	68.	1.2946	.20031	4662.7	.000954
	70.	1.2815	.19559	4275.3	.000942	70.	1.2871	.19786	4420.7	.000951
	72.	1.2738	.19317	4056.1	.000938	72.	1.2795	.19548	4193.5	.000947
	74.	1.2662	.19080	3850.4	.000934	74.	1.2720	.19316	3980.5	.000944
	76.	1.2585	.18849	3657.5	.000931	76.	1.2645	.19090	3780.9	.000941
	78.	1.2509	.18622	3476.8	.000927	78.	1.2570	.18869	3594.0	.000938
	80.	1.2432	.18399	3307.5	.000923	80.	1.2496	.18651	3419.2	.000934
	82.	1.2356	.18178	3148.9	.000919	82.	1.2421	.18436	3255.5	.000931
	84.	1.2279	.17959	3000.5	.000915	84.	1.2346	.18223	3102.3	.000927
	86.	1.2203	.17742	2861.5	.000911	86.	1.2272	.18012	2958.9	.000924
	88.	1.2126	.17527	2731.2	.000907	88.	1.2197	.17802	2824.6	.000920
	90.	1.2049	.17312	2609.2	.000903	90.	1.2123	.17593	2698.8	.000916
	92.	1.1973	.17097	2494.7	.000898	92.	1.2048	.17384	2580.9	.000912
	94.	1.1896	.16883	2387.4	.000894	94.	1.1973	.17177	2470.4	.000908
	96.	1.1819	.16670	2286.6	.000889	96.	1.1898	.16969	2366.6	.000904
	98.	1.1742	.16456	2192.0	.000884	98.	1.1824	.16762	2269.2	.000900
	100.	1.1665	.16243	2103.0	.000879	100.	1.1749	.16554	2177.6	.000895
	102.	1.1587	.16030	2019.3	.000874	102.	1.1674	.16347	2091.6	.000891
	104.	1.1510	.15817	1940.6	.000869	104.	1.1599	.16140	2010.5	.000886
	106.	1.1432	.15603	1866.3	.000863	106.	1.1523	.15933	1934.2	.000881
	108.	1.1354	.15390	1796.3	.000857	108.	1.1448	.15726	1862.3	.000876
	110.	1.1276	.15177	1730.3	.000852	110.	1.1373	.15519	1794.4	.000870
	112.	1.1198	.14964	1667.9	.000846	112.	1.1297	.15312	1730.4	.000865
	114.	1.1119	.14752	1608.9	.000840	114.	1.1222	.15106	1669.8	.000859
	116.	1.1041	.14540	1553.1	.000833	116.	1.1146	.14900	1612.6	.000854
	118.	1.0962	.14328	1500.3	.000827	118.	1.1070	.14694	1558.4	.000848
	120.	1.0882	.14117	1450.2	.000820	120.	1.0994	.14489	1507.0	.000842
	122.	1.0803	.13906	1402.7	.000814	122.	1.0918	.14284	1458.3	.000836
	124.	1.0723	.13696	1357.6	.000807	124.	1.0842	.14081	1412.1	.000830
	126.	1.0643	.13487	1314.7	.000800	126.	1.0765	.13878	1368.2	.000824
	128.	1.0563	.13279	1273.9	.000793	128.	1.0688	.13676	1326.5	.000818
	130.	1.0483	.13073	1235.2	.000786	130.	1.0612	.13475	1286.8	.000811
	132.	1.0402	.12867	1198.2	.000779	132.	1.0535	.13276	1249.1	.000805
	134.	1.0321	.12663	1163.0	.000772	134.	1.0457	.13078	1213.1	.000798
	136.	1.0239	.12460	1129.4	.000765	136.	1.0380	.12881	1178.8	.000792
	138.	1.0157	.12260	1097.3	.000758	138.	1.0302	.12686	1146.0	.000785
	140.	1.0075	.12060	1066.7	.000751	140.	1.0224	.12493	1114.8	.000779
	142.	.9993	.11863	1037.4	.000744	142.	1.0146	.12302	1084.9	.000772
	144.	.9910	.11668	1009.4	.000736	144.	1.0068	.12113	1056.4	.000765
	146.	.9827	.11476	982.5	.000729	146.	.9990	.11926	1029.1	.000760
	148.	.9743	.11286	956.9	.000722	148.	.9911	.11741	1002.9	.000753
	150.	.9659	.11099	932.2	.000715	150.	.9832	.11559	977.9	.000747
	152.	.9575	.10915	908.6	.000709	152.	.9753	.11381	953.9	.000741
	154.	.9491	.10736	885.9	.000702	154.	.9674	.11205	930.9	.000735
	156.	.9406	.10555	864.2	.000696	156.	.9595	.11030	908.8	.000729
	158.	.9321	.10375	843.3	.000689	158.	.9515	.10856	887.6	.000723
	160.	.9235	.10199	823.2	.000682	160.	.9436	.10684	867.2	.000717
	165.	.9020	.09771	776.3	.000667	165.	.9236	.10269	819.8	.000702
	170.	.8804	.09364	733.8	.000653	170.	.9035	.09873	776.7	.000689
	175.	.8587	.08978	695.0	.000640	175.	.8835	.09496	737.5	.000677
	180.	.8369	.08613	659.8	.000628	180.	.8634	.09138	701.8	.000666
	185.	.8152	.08271	627.6	.000618	185.	.8433	.08802	669.3	.000657
	190.	.7935	.07952	598.2	.000611	190.	.8234	.08486	639.6	.000649
	195.	.7719	.07656	571.5	.000605	195.	.8036	.08190	612.5	.000643
	200.	.7505	.07382	547.1	.000601	200.	.7840	.07915	587.7	.000638
	210.	.7087	.06899	504.6	.000599	210.	.7455	.07424	544.2	.000635
	220.	.6687	.06496	469.5	.000607	220.	.7084	.07007	508.0	.000637
	230.	.6308	.06162	440.7	.000622	230.	.6730	.06654	477.8	.000647
	240.	.5956	.05884	417.2	.000644	240.	.6396	.06358	452.7	.000663
	250.	.5632	.05653	398.2	.000672	250.	.6084	.06107	432.0	.000683
	260.	.5335	.05459	382.9	.000704	260.	.5794	.05895	414.9	.000708
	270.	.5066	.05296	370.7	.000740	270.	.5526	.05714	400.9	.000736
	280.	.4821	.05159	361.0	.000778	280.	.5280	.05558	389.4	.000767
	290.	.4599	.05044	353.4	.000817	290.	.5053	.05424	380.1	.000799
	300.	.4397	.04948	347.4	.000858	300.	.4845	.05309	372.6	.000833
	310.	.4213	.04876	342.9	.000901	310.	.4653	.05218	366.6	.000868
	320.	.4046	.04846	339.4	.000951	320.	.4477	.05167	361.8	.000909

* Two Phase Boundary

Table 5. Transport Properties of Oxygen, Isobars, SI Units.

	45.0 MPa Isobar					50.0 MPa Isobar				
	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s
*	59.358	1.3329	.21437	6100.4	.000975	* 59.894	1.3355	.21556	6218.1	.000978
	60.	1.3303	.21338	5993.5	.000974	60.	1.3351	.21540	6199.6	.000978
	62.	1.3226	.21043	5672.7	.000971	62.	1.3274	.21246	5863.7	.000976
	64.	1.3149	.20764	5370.2	.000967	64.	1.3199	.20970	5548.0	.000973
	66.	1.3074	.20500	5085.4	.000964	66.	1.3124	.20709	5251.6	.000971
	68.	1.2999	.20249	4817.7	.000962	68.	1.3050	.20461	4973.5	.000969
	70.	1.2924	.20007	4566.6	.000959	70.	1.2977	.20223	4713.0	.000967
	72.	1.2850	.19773	4331.1	.000956	72.	1.2904	.19994	4469.2	.000964
	74.	1.2777	.19547	4110.6	.000953	74.	1.2832	.19772	4241.0	.000962
	76.	1.2703	.19326	3904.3	.000951	76.	1.2759	.19556	4027.7	.000960
	78.	1.2630	.19109	3711.2	.000948	78.	1.2688	.19344	3828.3	.000957
	80.	1.2557	.18896	3530.6	.000945	80.	1.2616	.19136	3641.8	.000955
	82.	1.2484	.18687	3361.7	.000942	82.	1.2544	.18931	3467.6	.000952
	84.	1.2411	.18479	3203.7	.000939	84.	1.2473	.18729	3304.6	.000950
	86.	1.2338	.18273	3055.8	.000936	86.	1.2402	.18528	3152.3	.000947
	88.	1.2265	.18069	2917.4	.000933	88.	1.2331	.18329	3009.7	.000944
	90.	1.2192	.17866	2787.8	.000929	90.	1.2260	.18131	2876.2	.000941
	92.	1.2120	.17663	2666.4	.000926	92.	1.2189	.17934	2751.2	.000938
	94.	1.2047	.17461	2552.5	.000922	94.	1.2118	.17737	2634.0	.000935
	96.	1.1974	.17259	2445.7	.000918	96.	1.2047	.17540	2524.1	.000932
	98.	1.1901	.17057	2345.5	.000914	98.	1.1976	.17344	2421.0	.000928
	100.	1.1829	.16855	2251.3	.000910	100.	1.1905	.17147	2324.1	.000925
	102.	1.1756	.16654	2162.8	.000906	102.	1.1834	.16951	2233.1	.000921
	104.	1.1683	.16452	2079.5	.000902	104.	1.1763	.16755	2147.5	.000917
	106.	1.1610	.16251	2001.0	.000897	106.	1.1693	.16558	2066.9	.000913
	108.	1.1537	.16049	1927.1	.000893	108.	1.1622	.16362	1990.9	.000909
	110.	1.1464	.15848	1857.4	.000888	110.	1.1551	.16166	1919.3	.000905
	112.	1.1391	.15647	1791.6	.000883	112.	1.1480	.15970	1851.7	.000900
	114.	1.1318	.15446	1729.4	.000878	114.	1.1409	.15774	1787.9	.000896
	116.	1.1245	.15245	1670.6	.000873	116.	1.1339	.15578	1727.6	.000891
	118.	1.1172	.15045	1615.0	.000868	118.	1.1268	.15383	1670.5	.000886
	120.	1.1099	.14845	1562.3	.000862	120.	1.1197	.15188	1616.4	.000881
	122.	1.1025	.14646	1512.4	.000857	122.	1.1126	.14994	1565.2	.000876
	124.	1.0952	.14448	1465.1	.000851	124.	1.1055	.14800	1516.7	.000871
	126.	1.0878	.14250	1420.1	.000846	126.	1.0984	.14607	1470.6	.000866
	128.	1.0805	.14054	1377.4	.000840	128.	1.0913	.14415	1426.8	.000861
	130.	1.0731	.13858	1336.7	.000834	130.	1.0842	.14225	1385.2	.000855
	132.	1.0657	.13664	1298.1	.000828	132.	1.0771	.14035	1345.6	.000850
	134.	1.0583	.13471	1261.3	.000822	134.	1.0700	.13846	1307.9	.000845
	136.	1.0509	.13280	1226.2	.000816	136.	1.0629	.13659	1272.0	.000839
	138.	1.0435	.13090	1192.7	.000811	138.	1.0558	.13474	1237.8	.000834
	140.	1.0361	.12902	1160.8	.000805	140.	1.0487	.13290	1205.1	.000828
	142.	1.0287	.12715	1130.3	.000799	142.	1.0416	.13108	1173.9	.000823
	144.	1.0212	.12531	1101.2	.000793	144.	1.0345	.12927	1144.1	.000817
	146.	1.0138	.12349	1073.3	.000787	146.	1.0274	.12749	1115.7	.000812
	148.	1.0063	.12169	1046.6	.000781	148.	1.0202	.12573	1088.4	.000806
	150.	.9988	.11991	1021.1	.000775	150.	1.0131	.12399	1062.4	.000801
	152.	.9914	.11816	996.7	.000769	152.	1.0060	.12227	1037.4	.000795
	154.	.9839	.11644	973.2	.000764	154.	.9988	.12059	1013.5	.000790
	156.	.9764	.11473	950.7	.000758	156.	.9917	.11891	990.6	.000785
	158.	.9689	.11303	929.2	.000753	158.	.9846	.11725	968.6	.000780
	160.	.9614	.11137	908.5	.000747	160.	.9774	.11562	947.5	.000775
	165.	.9426	.10731	860.2	.000734	165.	.9596	.11164	898.3	.000763
	170.	.9238	.10343	816.4	.000722	170.	.9418	.10784	853.7	.000751
	175.	.9050	.09974	776.7	.000710	175.	.9241	.10420	813.2	.000740
	180.	.8862	.09622	740.4	.000700	180.	.9064	.10074	776.4	.000731
	185.	.8675	.09290	707.4	.000691	185.	.8888	.09746	742.8	.000722
	190.	.8489	.08977	677.2	.000684	190.	.8713	.09435	712.0	.000714
	195.	.8305	.08683	649.6	.000677	195.	.8539	.09142	683.9	.000708
	200.	.8122	.08408	624.4	.000672	200.	.8367	.08867	658.1	.000703
	210.	.7764	.07912	580.0	.000667	210.	.8030	.08367	612.8	.000696
	220.	.7416	.07484	542.7	.000667	220.	.7702	.07932	574.6	.000695
	230.	.7083	.07117	511.4	.000673	230.	.7387	.07554	542.2	.000698
	240.	.6766	.06805	485.1	.000684	240.	.7085	.07228	514.8	.000706
	250.	.6467	.06537	463.0	.000699	250.	.6798	.06946	491.6	.000718
	260.	.6186	.06308	444.5	.000719	260.	.6526	.06702	472.0	.000733
	270.	.5923	.06110	429.1	.000741	270.	.6271	.06489	455.4	.000751
	280.	.5679	.05939	416.2	.000766	280.	.6031	.06303	441.4	.000771
	290.	.5453	.05789	405.6	.000793	290.	.5806	.06139	429.6	.000793
	300.	.5242	.05658	396.7	.000820	300.	.5596	.05994	419.7	.000816
	310.	.5047	.05551	389.4	.000850	310.	.5400	.05871	411.4	.000841
	320.	.4866	.05480	383.5	.000885	320.	.5217	.05783	404.4	.000870

* Two Phase Boundary

Table 5. Transport Properties of Oxygen, Isobars, SI Units.

	55.0 MPa Isobar					60.0 MPa Isobar				
	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s
*	60.425	1.3381	.21675	6331.5	.000981	* 60.954	1.3407	.21793	6440.8	.000984
	62.	1.3321	.21446	6056.7	.000980	62.	1.3367	.21643	6251.5	.000984
	64.	1.3246	.21173	5727.3	.000979	64.	1.3293	.21372	5908.1	.000984
	66.	1.3173	.20915	5418.8	.000977	66.	1.3220	.21116	5587.2	.000983
	68.	1.3100	.20670	5130.1	.000975	68.	1.3148	.20875	5287.5	.000982
	70.	1.3028	.20436	4860.0	.000974	70.	1.3077	.20644	5007.6	.000981
	72.	1.2956	.20210	4607.5	.000972	72.	1.3006	.20422	4746.3	.000979
	74.	1.2885	.19992	4371.6	.000970	74.	1.2936	.20208	4502.4	.000978
	76.	1.2814	.19780	4151.2	.000968	76.	1.2867	.20000	4274.7	.000977
	78.	1.2743	.19573	3945.3	.000967	78.	1.2797	.19798	4062.2	.000975
	80.	1.2673	.19370	3752.9	.000965	80.	1.2728	.19599	3863.9	.000974
	82.	1.2603	.19170	3573.2	.000963	82.	1.2660	.19404	3678.7	.000972
	84.	1.2533	.18973	3405.3	.000960	84.	1.2591	.19211	3505.7	.000970
	86.	1.2463	.18777	3248.3	.000958	86.	1.2523	.19020	3344.0	.000968
	88.	1.2394	.18583	3101.5	.000956	88.	1.2455	.18830	3192.9	.000966
	90.	1.2324	.18390	2964.1	.000953	90.	1.2387	.18642	3051.5	.000964
	92.	1.2255	.18197	2835.4	.000950	92.	1.2319	.18454	2919.1	.000962
	94.	1.2185	.18005	2714.9	.000948	94.	1.2251	.18267	2795.2	.000960
	96.	1.2116	.17814	2601.8	.000945	96.	1.2183	.18080	2679.0	.000957
	98.	1.2047	.17622	2495.8	.000942	98.	1.2116	.17894	2570.0	.000954
	100.	1.1978	.17431	2396.2	.000938	100.	1.2048	.17707	2467.6	.000951
	102.	1.1909	.17240	2302.7	.000935	102.	1.1981	.17520	2371.5	.000949
	104.	1.1840	.17048	2214.7	.000932	104.	1.1914	.17333	2281.1	.000945
	106.	1.1771	.16857	2131.8	.000928	106.	1.1847	.17146	2196.0	.000942
	108.	1.1702	.16665	2053.8	.000924	108.	1.1779	.16959	2115.9	.000939
	110.	1.1634	.16474	1980.3	.000920	110.	1.1712	.16772	2040.4	.000935
	112.	1.1565	.16282	1910.9	.000916	112.	1.1645	.16585	1969.2	.000931
	114.	1.1496	.16091	1845.4	.000912	114.	1.1579	.16398	1901.9	.000928
	116.	1.1427	.15900	1783.4	.000908	116.	1.1512	.16211	1838.4	.000924
	118.	1.1359	.15709	1724.9	.000903	118.	1.1445	.16024	1778.3	.000920
	120.	1.1290	.15518	1669.4	.000899	120.	1.1378	.15838	1721.4	.000916
	122.	1.1221	.15328	1616.9	.000894	122.	1.1312	.15652	1667.6	.000911
	124.	1.1153	.15139	1567.1	.000890	124.	1.1245	.15467	1616.5	.000907
	126.	1.1084	.14951	1519.8	.000885	126.	1.1178	.15282	1568.1	.000903
	128.	1.1016	.14763	1475.0	.000880	128.	1.1112	.15098	1522.1	.000898
	130.	1.0947	.14576	1432.3	.000875	130.	1.1046	.14915	1478.4	.000894
	132.	1.0878	.14391	1391.8	.000870	132.	1.0979	.14733	1436.8	.000889
	134.	1.0810	.14206	1353.2	.000865	134.	1.0913	.14552	1397.3	.000884
	136.	1.0741	.14023	1316.4	.000860	136.	1.0847	.14372	1359.6	.000880
	138.	1.0673	.13841	1281.4	.000855	138.	1.0781	.14194	1323.8	.000875
	140.	1.0604	.13661	1247.9	.000850	140.	1.0714	.14017	1289.6	.000870
	142.	1.0536	.13482	1216.1	.000845	142.	1.0648	.13842	1256.9	.000866
	144.	1.0468	.13306	1185.6	.000840	144.	1.0582	.13668	1225.7	.000861
	146.	1.0399	.13131	1156.5	.000835	146.	1.0516	.13496	1196.0	.000856
	148.	1.0331	.12958	1128.6	.000830	148.	1.0451	.13326	1167.5	.000851
	150.	1.0263	.12787	1102.0	.000825	150.	1.0385	.13158	1140.3	.000847
	152.	1.0194	.12618	1076.5	.000820	152.	1.0319	.12992	1114.2	.000842
	154.	1.0126	.12453	1052.1	.000815	154.	1.0253	.12829	1089.2	.000837
	156.	1.0058	.12288	1028.7	.000810	156.	1.0188	.12666	1065.3	.000833
	158.	.9990	.12125	1006.2	.000805	158.	1.0122	.12506	1042.4	.000828
	160.	.9921	.11964	984.7	.000800	160.	1.0057	.12348	1020.4	.000824
	165.	.9751	.11574	934.5	.000789	165.	.9894	.11963	969.1	.000813
	170.	.9582	.11199	889.0	.000778	170.	.9732	.11593	922.7	.000802
	175.	.9413	.10840	847.8	.000768	175.	.9570	.11239	880.6	.000793
	180.	.9245	.10498	810.2	.000758	180.	.9409	.10901	842.2	.000784
	185.	.9078	.10173	775.9	.000750	185.	.9250	.10578	807.3	.000776
	190.	.8912	.09865	744.6	.000743	190.	.9091	.10272	775.3	.000769
	195.	.8747	.09574	715.9	.000736	195.	.8935	.09982	746.0	.000762
	200.	.8584	.09299	689.6	.000731	200.	.8779	.09707	719.2	.000757
	210.	.8264	.08797	643.3	.000724	210.	.8474	.09203	671.8	.000749
	220.	.7953	.08355	604.0	.000721	220.	.8177	.08756	631.6	.000745
	230.	.7653	.07968	570.7	.000722	230.	.7889	.08362	597.4	.000745
	240.	.7364	.07631	542.4	.000728	240.	.7613	.08015	568.2	.000749
	250.	.7088	.07336	518.2	.000736	250.	.7347	.07709	543.1	.000755
	260.	.6826	.07078	497.6	.000748	260.	.7093	.07439	521.7	.000764
	270.	.6578	.06852	480.1	.000763	270.	.6852	.07200	503.2	.000776
	280.	.6343	.06652	465.1	.000779	280.	.6623	.06987	487.4	.000790
	290.	.6122	.06475	452.3	.000798	290.	.6406	.06797	473.8	.000805
	300.	.5914	.06316	441.5	.000817	300.	.6201	.06627	462.2	.000821
	310.	.5718	.06180	432.2	.000838	310.	.6007	.06477	452.1	.000839
	320.	.5535	.06075	424.4	.000862	320.	.5824	.06356	443.6	.000859

* Two Phase Boundary

Table 5. Transport Properties of Oxygen, Isobars, SI Units.

	65.0 MPa Isobar					70.0 MPa Isobar				
	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s
*	61.478	1.3432	.21911	6545.9	.000988	* 62.000	1.3456	.22028	6647.1	.000991
	62.	1.3412	.21837	6448.3	.000988	62.	1.3456	.22028	6647.1	.000991
	64.	1.3339	.21567	6090.3	.000988	64.	1.3383	.21760	6274.1	.000992
	66.	1.3266	.21315	5756.7	.000988	66.	1.3312	.21509	5927.3	.000992
	68.	1.3195	.21076	5445.7	.000987	68.	1.3241	.21273	5604.8	.000993
	70.	1.3125	.20848	5155.8	.000987	70.	1.3172	.21049	5304.6	.000993
	72.	1.3055	.20630	4885.4	.000986	72.	1.3103	.20834	5025.0	.000993
	74.	1.2986	.20420	4633.4	.000986	74.	1.3035	.20627	4764.7	.000992
	76.	1.2918	.20216	4398.4	.000985	76.	1.2968	.20427	4522.2	.000992
	78.	1.2850	.20017	4179.2	.000984	78.	1.2901	.20233	4296.2	.000992
	80.	1.2782	.19823	3974.7	.000983	80.	1.2834	.20042	4085.5	.000991
	82.	1.2714	.19632	3783.9	.000981	82.	1.2768	.19856	3889.0	.000990
	84.	1.2647	.19444	3605.8	.000980	84.	1.2702	.19671	3705.6	.000989
	86.	1.2580	.19257	3439.4	.000978	86.	1.2636	.19489	3534.4	.000988
	88.	1.2513	.19072	3283.9	.000977	88.	1.2570	.19309	3374.5	.000987
	90.	1.2447	.18888	3138.4	.000975	90.	1.2505	.19129	3225.0	.000985
	92.	1.2380	.18705	3002.4	.000973	92.	1.2440	.18950	3085.2	.000984
	94.	1.2314	.18523	2874.9	.000971	94.	1.2375	.18772	2954.2	.000982
	96.	1.2248	.18340	2755.5	.000969	96.	1.2310	.18594	2831.6	.000980
	98.	1.2182	.18158	2643.5	.000966	98.	1.2245	.18416	2716.6	.000978
	100.	1.2116	.17976	2538.4	.000964	100.	1.2181	.18238	2608.6	.000976
	102.	1.2050	.17793	2439.7	.000961	102.	1.2117	.18060	2507.3	.000974
	104.	1.1984	.17611	2346.9	.000959	104.	1.2052	.17881	2412.0	.000971
	106.	1.1919	.17428	2259.5	.000956	106.	1.1988	.17703	2322.4	.000968
	108.	1.1853	.17245	2177.3	.000953	108.	1.1924	.17524	2238.0	.000966
	110.	1.1788	.17062	2099.8	.000949	110.	1.1860	.17345	2158.5	.000963
	112.	1.1723	.16879	2026.7	.000946	112.	1.1797	.17165	2083.6	.000960
	114.	1.1657	.16696	1957.7	.000943	114.	1.1733	.16986	2012.8	.000957
	116.	1.1592	.16513	1892.5	.000939	116.	1.1669	.16807	1946.0	.000953
	118.	1.1527	.16330	1830.9	.000935	118.	1.1606	.16628	1882.8	.000950
	120.	1.1462	.16148	1772.6	.000932	120.	1.1543	.16449	1823.0	.000947
	122.	1.1397	.15966	1717.4	.000928	122.	1.1479	.16270	1766.4	.000943
	124.	1.1333	.15784	1665.0	.000924	124.	1.1416	.16092	1712.7	.000939
	126.	1.1268	.15603	1615.4	.000920	126.	1.1353	.15914	1661.8	.000936
	128.	1.1204	.15422	1568.2	.000915	128.	1.1291	.15736	1613.6	.000932
	130.	1.1139	.15243	1523.5	.000911	130.	1.1228	.15560	1567.7	.000928
	132.	1.1075	.15064	1480.9	.000907	132.	1.1165	.15384	1524.1	.000924
	134.	1.1010	.14886	1440.4	.000903	134.	1.1103	.15209	1482.6	.000920
	136.	1.0946	.14710	1401.8	.000898	136.	1.1040	.15036	1443.1	.000916
	138.	1.0882	.14534	1365.1	.000894	138.	1.0978	.14863	1405.5	.000912
	140.	1.0818	.14360	1330.1	.000889	140.	1.0916	.14692	1369.7	.000907
	142.	1.0754	.14188	1296.7	.000885	142.	1.0854	.14522	1335.5	.000903
	144.	1.0690	.14017	1264.8	.000880	144.	1.0792	.14354	1302.9	.000899
	146.	1.0626	.13848	1234.3	.000876	146.	1.0730	.14187	1271.7	.000895
	148.	1.0563	.13680	1205.2	.000872	148.	1.0668	.14022	1241.9	.000891
	150.	1.0499	.13514	1177.3	.000867	150.	1.0607	.13858	1213.4	.000886
	152.	1.0436	.13351	1150.7	.000863	152.	1.0545	.13697	1186.1	.000882
	154.	1.0372	.13190	1125.2	.000858	154.	1.0484	.13537	1160.0	.000878
	156.	1.0309	.13030	1100.7	.000854	156.	1.0423	.13379	1135.0	.000874
	158.	1.0246	.12872	1077.2	.000850	158.	1.0362	.13223	1111.0	.000870
	160.	1.0183	.12716	1054.8	.000846	160.	1.0301	.13069	1088.0	.000866
	165.	1.0026	.12336	1002.4	.000835	165.	1.0149	.12693	1034.5	.000856
	170.	.9870	.11970	955.0	.000825	170.	.9999	.12332	986.1	.000847
	175.	.9715	.11619	912.0	.000816	175.	.9849	.11984	942.2	.000838
	180.	.9560	.11284	872.9	.000808	180.	.9700	.11651	902.2	.000830
	185.	.9407	.10964	837.2	.000800	185.	.9553	.11333	865.8	.000822
	190.	.9256	.10659	804.5	.000793	190.	.9407	.11030	832.4	.000815
	195.	.9105	.10370	774.6	.000786	195.	.9262	.10741	801.9	.000809
	200.	.8956	.10095	747.2	.000781	200.	.9119	.10467	773.9	.000804
	210.	.8664	.09590	698.8	.000773	210.	.8837	.09959	724.4	.000795
	220.	.8379	.09139	657.6	.000768	220.	.8563	.09505	682.3	.000790
	230.	.8103	.08738	622.5	.000767	230.	.8297	.09098	646.3	.000788
	240.	.7836	.08382	592.4	.000769	240.	.8040	.08734	615.4	.000788
	250.	.7580	.08066	566.6	.000773	250.	.7792	.08409	588.7	.000791
	260.	.7334	.07785	544.3	.000781	260.	.7554	.08118	565.7	.000797
	270.	.7100	.07534	525.1	.000790	270.	.7325	.07856	545.8	.000804
	280.	.6876	.07310	508.5	.000801	280.	.7107	.07620	528.6	.000813
	290.	.6664	.07108	494.2	.000813	290.	.6899	.07407	513.6	.000823
	300.	.6462	.06925	481.8	.000827	300.	.6701	.07213	500.5	.000834
	310.	.6270	.06763	471.1	.000842	310.	.6512	.07039	489.2	.000847
	320.	.6089	.06628	461.9	.000859	320.	.6332	.06890	479.4	.000861

* Two Phase Boundary

Table 5. Transport Properties of Oxygen, Isobars, SI Units.

	75.0 MPa Isobar					80.0 MPa Isobar				
	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s
*	62.518	1.3480	.22146	6744.5	.000994	* 63.032	1.3504	.22263	6838.0	.000997
	64.	1.3427	.21950	6459.4	.000995	64.	1.3469	.22137	6646.3	.000998
	66.	1.3356	.21701	6099.2	.000997	66.	1.3399	.21890	6272.2	.001000
	68.	1.3286	.21467	5764.8	.000998	68.	1.3330	.21659	5925.6	.001002
	70.	1.3217	.21246	5454.0	.000998	70.	1.3262	.21440	5604.1	.001004
	72.	1.3150	.21034	5165.1	.000999	72.	1.3195	.21231	5305.6	.001005
	74.	1.3083	.20831	4896.3	.000999	74.	1.3129	.21031	5028.2	.001005
	76.	1.3016	.20635	4646.1	.000999	76.	1.3063	.20838	4770.2	.001006
	78.	1.2950	.20444	4413.2	.000999	78.	1.2998	.20651	4530.3	.001006
	80.	1.2884	.20258	4196.2	.000999	80.	1.2934	.20468	4306.9	.001006
	82.	1.2819	.20075	3993.9	.000998	82.	1.2869	.20289	4098.8	.001006
	84.	1.2754	.19894	3805.3	.000998	84.	1.2806	.20113	3904.8	.001006
	86.	1.2690	.19716	3629.2	.000997	86.	1.2742	.19939	3723.8	.001006
	88.	1.2625	.19540	3464.9	.000996	88.	1.2679	.19767	3554.9	.001005
	90.	1.2561	.19365	3311.2	.000995	90.	1.2616	.19595	3397.1	.001004
	92.	1.2497	.19190	3167.6	.000994	92.	1.2553	.19425	3249.6	.001004
	94.	1.2434	.19016	3033.1	.000992	94.	1.2491	.19254	3111.6	.001002
	96.	1.2370	.18842	2907.2	.000991	96.	1.2428	.19084	2982.3	.001001
	98.	1.2307	.18668	2789.1	.000989	98.	1.2366	.18914	2861.2	.001000
	100.	1.2244	.18494	2678.3	.000987	100.	1.2304	.18744	2747.6	.000998
	102.	1.2181	.18320	2574.3	.000985	102.	1.2242	.18574	2640.9	.000997
	104.	1.2118	.18145	2476.6	.000983	104.	1.2181	.18403	2540.7	.000995
	106.	1.2055	.17970	2384.7	.000981	106.	1.2119	.18232	2446.4	.000993
	108.	1.1992	.17795	2298.2	.000978	108.	1.2058	.18061	2357.7	.000991
	110.	1.1930	.17620	2216.6	.000976	110.	1.1997	.17889	2274.2	.000988
	112.	1.1868	.17445	2139.8	.000973	112.	1.1936	.17717	2195.4	.000986
	114.	1.1805	.17269	2067.2	.000970	114.	1.1875	.17545	2121.0	.000983
	116.	1.1743	.17093	1998.7	.000967	116.	1.1814	.17372	2050.8	.000981
	118.	1.1681	.16917	1933.9	.000964	118.	1.1754	.17200	1984.5	.000978
	120.	1.1620	.16742	1872.7	.000961	120.	1.1693	.17027	1921.7	.000975
	122.	1.1558	.16566	1814.7	.000958	122.	1.1633	.16855	1862.3	.000972
	124.	1.1496	.16391	1759.7	.000954	124.	1.1573	.16683	1806.0	.000969
	126.	1.1435	.16216	1707.6	.000951	126.	1.1513	.16511	1752.7	.000965
	128.	1.1374	.16042	1658.1	.000947	128.	1.1453	.16339	1702.0	.000962
	130.	1.1313	.15868	1611.2	.000944	130.	1.1394	.16168	1653.9	.000959
	132.	1.1252	.15695	1566.5	.000940	132.	1.1334	.15998	1608.2	.000955
	134.	1.1191	.15523	1524.0	.000936	134.	1.1275	.15828	1564.8	.000952
	136.	1.1130	.15352	1483.6	.000932	136.	1.1216	.15660	1523.4	.000948
	138.	1.1069	.15182	1445.1	.000928	138.	1.1157	.15492	1484.0	.000944
	140.	1.1009	.15013	1408.4	.000924	140.	1.1098	.15326	1446.5	.000941
	142.	1.0949	.14846	1373.5	.000921	142.	1.1039	.15160	1410.7	.000937
	144.	1.0888	.14680	1340.1	.000917	144.	1.0980	.14996	1376.5	.000933
	146.	1.0828	.14515	1308.2	.000913	146.	1.0922	.14833	1343.9	.000930
	148.	1.0768	.14352	1277.7	.000909	148.	1.0863	.14672	1312.7	.000926
	150.	1.0709	.14190	1248.5	.000905	150.	1.0805	.14513	1282.9	.000922
	152.	1.0649	.14031	1220.7	.000901	152.	1.0747	.14355	1254.4	.000918
	154.	1.0590	.13873	1194.0	.000897	154.	1.0689	.14199	1227.1	.000915
	156.	1.0530	.13717	1168.4	.000893	156.	1.0632	.14044	1200.9	.000911
	158.	1.0471	.13563	1143.9	.000889	158.	1.0574	.13891	1175.9	.000907
	160.	1.0412	.13410	1120.4	.000885	160.	1.0517	.13740	1151.9	.000904
	165.	1.0265	.13038	1065.7	.000876	165.	1.0374	.13372	1096.0	.000895
	170.	1.0119	.12680	1016.2	.000867	170.	1.0233	.13016	1045.4	.000886
	175.	.9974	.12335	971.3	.000858	175.	1.0092	.12673	999.6	.000878
	180.	.9831	.12004	930.5	.000850	180.	.9953	.12344	957.9	.000870
	185.	.9688	.11688	893.3	.000843	185.	.9815	.12029	919.8	.000863
	190.	.9547	.11385	859.2	.000836	190.	.9678	.11728	885.1	.000856
	195.	.9407	.11097	828.0	.000830	195.	.9543	.11440	853.2	.000850
	200.	.9269	.10823	799.4	.000825	200.	.9409	.11166	824.0	.000845
	210.	.8997	.10314	748.8	.000816	210.	.9146	.10656	772.3	.000836
	220.	.8733	.09856	705.8	.000810	220.	.8890	.10194	728.3	.000830
	230.	.8475	.09444	668.9	.000807	230.	.8641	.09777	690.5	.000826
	240.	.8226	.09073	637.2	.000807	240.	.8399	.09400	658.0	.000825
	250.	.7986	.08740	609.8	.000809	250.	.8166	.09059	630.0	.000825
	260.	.7755	.08439	586.1	.000812	260.	.7940	.08750	605.6	.000828
	270.	.7532	.08167	565.5	.000818	270.	.7724	.08468	584.4	.000832
	280.	.7319	.07921	547.6	.000825	280.	.7515	.08211	565.9	.000837
	290.	.7115	.07696	532.0	.000833	290.	.7316	.07975	549.7	.000844
	300.	.6921	.07491	518.4	.000842	300.	.7124	.07759	535.5	.000851
	310.	.6735	.07305	506.5	.000852	310.	.6941	.07562	523.1	.000859
	320.	.6557	.07143	496.1	.000864	320.	.6766	.07388	512.2	.000869

* Two Phase Boundary

Table 5. Transport Properties of Oxygen, Isobars, SI Units.

	85.0 MPa Isobar					90.0 MPa Isobar				
	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s
*	63.544	1.3527	.22380	6927.9	.001000					
	64.	1.3511	.22321	6834.9	.001001	* 64.052	1.3550	.22497	7014.2	.001003
	66.	1.3441	.22076	6446.5	.001004	66.	1.3483	.22260	6622.2	.001007
	68.	1.3373	.21847	6087.5	.001006	68.	1.3415	.22032	6250.3	.001010
	70.	1.3306	.21631	5755.0	.001008	70.	1.3348	.21818	5906.5	.001013
	72.	1.3239	.21425	5446.6	.001010	72.	1.3283	.21615	5588.2	.001015
	74.	1.3174	.21228	5160.4	.001011	74.	1.3218	.21422	5293.1	.001017
	76.	1.3109	.21038	4894.6	.001012	76.	1.3154	.21235	5019.2	.001018
	78.	1.3045	.20855	4647.5	.001013	78.	1.3091	.21055	4764.8	.001020
	80.	1.2981	.20678	4417.6	.001014	80.	1.3028	.20879	4528.3	.001021
	82.	1.2918	.20500	4203.5	.001014	82.	1.2966	.20707	4308.3	.001021
	84.	1.2855	.20328	4004.1	.001014	84.	1.2904	.20538	4103.4	.001022
	86.	1.2793	.20157	3818.2	.001014	86.	1.2842	.20372	3912.5	.001022
	88.	1.2731	.19989	3644.8	.001014	88.	1.2781	.20207	3734.4	.001022
	90.	1.2669	.19821	3482.8	.001013	90.	1.2720	.20043	3568.1	.001022
	92.	1.2607	.19654	3331.3	.001013	92.	1.2660	.19880	3412.8	.001022
	94.	1.2546	.19488	3189.7	.001012	94.	1.2599	.19717	3267.5	.001021
	96.	1.2485	.19322	3057.1	.001011	96.	1.2539	.19555	3131.6	.001021
	98.	1.2424	.19156	2932.9	.001010	98.	1.2479	.19392	3004.2	.001020
	100.	1.2363	.18989	2816.4	.001009	100.	1.2420	.19229	2884.8	.001019
	102.	1.2302	.18823	2707.0	.001007	102.	1.2360	.19066	2772.7	.001018
	104.	1.2242	.18656	2604.3	.001006	104.	1.2301	.18903	2667.5	.001017
	106.	1.2182	.18488	2507.7	.001004	106.	1.2242	.18739	2568.5	.001015
	108.	1.2122	.18320	2416.8	.001002	108.	1.2183	.18574	2475.4	.001014
	110.	1.2062	.18152	2331.2	.001000	110.	1.2124	.18409	2387.7	.001012
	112.	1.2002	.17983	2250.5	.000998	112.	1.2066	.18243	2305.1	.001010
	114.	1.1942	.17814	2174.3	.000996	114.	1.2007	.18078	2227.1	.001008
	116.	1.1883	.17645	2102.4	.000993	116.	1.1949	.17911	2153.5	.001006
	118.	1.1824	.17475	2034.5	.000991	118.	1.1891	.17745	2083.9	.001003
	120.	1.1765	.17306	1970.2	.000988	120.	1.1833	.17578	2018.2	.001001
	122.	1.1706	.17136	1909.4	.000985	122.	1.1775	.17411	1955.9	.000998
	124.	1.1647	.16967	1851.8	.000982	124.	1.1718	.17245	1896.9	.000996
	126.	1.1588	.16798	1797.1	.000979	126.	1.1660	.17078	1841.0	.000993
	128.	1.1530	.16629	1745.3	.000976	128.	1.1603	.16912	1788.0	.000990
	130.	1.1471	.16461	1696.1	.000973	130.	1.1546	.16746	1737.6	.000987
	132.	1.1413	.16293	1649.3	.000970	132.	1.1489	.16580	1689.8	.000984
	134.	1.1355	.16126	1604.8	.000967	134.	1.1433	.16416	1644.3	.000981
	136.	1.1297	.15959	1562.5	.000963	136.	1.1376	.16251	1601.0	.000978
	138.	1.1240	.15794	1522.2	.000960	138.	1.1320	.16088	1559.8	.000974
	140.	1.1182	.15629	1483.8	.000956	140.	1.1263	.15926	1520.5	.000971
	142.	1.1125	.15466	1447.2	.000953	142.	1.1207	.15764	1483.1	.000968
	144.	1.1068	.15304	1412.2	.000949	144.	1.1152	.15604	1447.4	.000964
	146.	1.1011	.15143	1378.9	.000946	146.	1.1096	.15445	1413.2	.000961
	148.	1.0954	.14984	1347.0	.000942	148.	1.1040	.15287	1380.7	.000958
	150.	1.0897	.14826	1316.5	.000939	150.	1.0985	.15131	1349.5	.000954
	152.	1.0841	.14669	1287.4	.000935	152.	1.0930	.14976	1319.7	.000951
	154.	1.0784	.14515	1259.5	.000931	154.	1.0875	.14822	1291.2	.000947
	156.	1.0728	.14362	1232.7	.000928	156.	1.0820	.14671	1263.9	.000944
	158.	1.0672	.14210	1207.1	.000924	158.	1.0766	.14520	1237.7	.000941
	160.	1.0616	.14061	1182.6	.000921	160.	1.0711	.14372	1212.6	.000937
	165.	1.0478	.13695	1125.5	.000912	165.	1.0576	.14009	1154.3	.000929
	170.	1.0340	.13341	1073.8	.000904	170.	1.0442	.13658	1101.5	.000921
	175.	1.0203	.13001	1027.0	.000896	175.	1.0309	.13319	1053.7	.000913
	180.	1.0068	.12674	984.4	.000888	180.	1.0177	.12993	1010.2	.000906
	185.	.9934	.12360	945.6	.000881	185.	1.0047	.12680	970.6	.000899
	190.	.9802	.12059	910.1	.000875	190.	.9918	.12380	934.3	.000893
	195.	.9670	.11772	877.5	.000869	195.	.9790	.12093	901.1	.000887
	200.	.9540	.11497	847.7	.000864	200.	.9664	.11818	870.6	.000882
	210.	.9285	.10985	794.9	.000855	210.	.9416	.11305	816.7	.000873
	220.	.9036	.10521	749.9	.000848	220.	.9174	.10837	770.7	.000866
	230.	.8794	.10099	711.3	.000844	230.	.8938	.10411	731.3	.000861
	240.	.8560	.09716	678.0	.000842	240.	.8710	.10022	697.3	.000858
	250.	.8332	.09368	649.2	.000841	250.	.8488	.09667	667.8	.000857
	260.	.8113	.09050	624.2	.000843	260.	.8274	.09341	642.1	.000857
	270.	.7901	.08759	602.4	.000845	270.	.8067	.09041	619.7	.000859
	280.	.7698	.08492	583.3	.000849	280.	.7868	.08765	600.1	.000861
	290.	.7502	.08246	566.6	.000854	290.	.7676	.08509	582.8	.000865
	300.	.7314	.08020	551.9	.000860	300.	.7492	.08272	567.6	.000869
	310.	.7134	.07812	539.0	.000866	310.	.7314	.08054	554.3	.000873
	320.	.6961	.07625	527.6	.000874	320.	.7144	.07855	542.5	.000879

* Two Phase Boundary

Table 5. Transport Properties of Oxygen, Isobars, SI Units.

	95.0 MPa Isobar					100.0 MPa Isobar				
	Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s		Temp. K	Density g/cm**3	Thermal Cond. W/m.K	Viscosity micro- g/cm.s	Thermal Diffusivity cm**2/s
*	64.558	1.3573	.22614	7097.1	.001006	*	65.060	1.3595	.22730	7176.6	.001009
	66.	1.3523	.22441	6799.1	.001009		66.	1.3563	.22619	6977.4	.001012
	68.	1.3456	.22215	6414.2	.001013		68.	1.3496	.22396	6579.1	.001016
	70.	1.3390	.22003	6058.9	.001017		70.	1.3430	.22186	6212.0	.001021
	72.	1.3325	.21803	5730.3	.001020		72.	1.3366	.21988	5873.0	.001024
	74.	1.3261	.21612	5426.1	.001022		74.	1.3303	.21800	5559.5	.001027
	76.	1.3198	.21429	5144.0	.001024		76.	1.3240	.21619	5269.2	.001029
	78.	1.3135	.21251	4882.3	.001026		78.	1.3179	.21445	4999.9	.001032
	80.	1.3073	.21079	4639.1	.001027		80.	1.3118	.21276	4750.0	.001033
	82.	1.3012	.20911	4413.0	.001028		82.	1.3057	.21111	4517.7	.001035
	84.	1.2951	.20745	4202.6	.001029		84.	1.2997	.20948	4301.7	.001036
	86.	1.2890	.20582	4006.5	.001030		86.	1.2937	.20789	4100.5	.001037
	88.	1.2830	.20421	3823.8	.001030		88.	1.2878	.20631	3913.0	.001038
	90.	1.2770	.20260	3653.2	.001031		90.	1.2819	.20474	3738.2	.001039
	92.	1.2711	.20101	3493.9	.001031		92.	1.2760	.20318	3574.9	.001039
	94.	1.2651	.19942	3345.0	.001030		94.	1.2702	.20163	3422.2	.001039
	96.	1.2592	.19783	3205.7	.001030		96.	1.2644	.20007	3279.5	.001039
	98.	1.2533	.19624	3075.2	.001030		98.	1.2586	.19851	3145.8	.001039
	100.	1.2475	.19465	2952.8	.001029		100.	1.2528	.19695	3020.5	.001038
	102.	1.2416	.19305	2838.0	.001028		102.	1.2471	.19539	2903.0	.001038
	104.	1.2358	.19145	2730.2	.001027		104.	1.2414	.19382	2792.6	.001037
	106.	1.2300	.18984	2628.9	.001026		106.	1.2357	.19225	2688.9	.001036
	108.	1.2242	.18823	2533.6	.001024		108.	1.2300	.19066	2591.3	.001035
	110.	1.2185	.18661	2443.8	.001023		110.	1.2243	.18908	2499.5	.001034
	112.	1.2127	.18498	2359.2	.001021		112.	1.2187	.18748	2412.9	.001032
	114.	1.2070	.18336	2279.4	.001019		114.	1.2131	.18588	2331.3	.001031
	116.	1.2013	.18172	2204.1	.001017		116.	1.2074	.18428	2254.3	.001029
	118.	1.1956	.18009	2132.9	.001015		118.	1.2019	.18267	2181.5	.001027
	120.	1.1899	.17845	2065.6	.001013		120.	1.1963	.18106	2112.6	.001025
	122.	1.1843	.17681	2001.9	.001011		122.	1.1907	.17944	2047.5	.001023
	124.	1.1786	.17517	1941.6	.001008		124.	1.1852	.17783	1985.8	.001021
	126.	1.1730	.17352	1884.4	.001006		126.	1.1797	.17621	1927.3	.001018
	128.	1.1674	.17189	1830.2	.001003		128.	1.1742	.17459	1871.9	.001016
	130.	1.1618	.17025	1778.7	.001000		130.	1.1687	.17298	1819.2	.001013
	132.	1.1562	.16862	1729.8	.000997		132.	1.1633	.17137	1769.2	.001010
	134.	1.1507	.16699	1683.2	.000995		134.	1.1578	.16976	1721.7	.001008
	136.	1.1451	.16537	1639.0	.000992		136.	1.1524	.16816	1676.4	.001005
	138.	1.1396	.16375	1596.8	.000988		138.	1.1470	.16656	1633.4	.001002
	140.	1.1341	.16215	1556.7	.000985		140.	1.1416	.16497	1592.4	.000999
	142.	1.1287	.16055	1518.4	.000982		142.	1.1363	.16339	1553.2	.000996
	144.	1.1232	.15896	1481.9	.000979		144.	1.1309	.16182	1515.9	.000993
	146.	1.1178	.15739	1447.0	.000976		146.	1.1256	.16026	1480.3	.000990
	148.	1.1123	.15583	1413.7	.000973		148.	1.1203	.15872	1446.3	.000987
	150.	1.1069	.15428	1381.9	.000969		150.	1.1150	.15718	1413.8	.000984
	152.	1.1015	.15274	1351.5	.000966		152.	1.1097	.15566	1382.7	.000981
	154.	1.0962	.15122	1322.3	.000963		154.	1.1045	.15415	1352.9	.000978
	156.	1.0908	.14972	1294.4	.000960		156.	1.0992	.15266	1324.4	.000975
	158.	1.0855	.14823	1267.7	.000956		158.	1.0940	.15118	1297.1	.000971
	160.	1.0802	.14675	1242.1	.000953		160.	1.0888	.14971	1271.0	.000968
	165.	1.0670	.14315	1182.5	.000945		165.	1.0759	.14613	1210.1	.000961
	170.	1.0539	.13966	1128.6	.000937		170.	1.0631	.14265	1155.1	.000953
	175.	1.0409	.13628	1079.8	.000930		175.	1.0505	.13930	1105.3	.000946
	180.	1.0281	.13304	1035.4	.000923		180.	1.0379	.13606	1059.9	.000939
	185.	1.0154	.12991	994.9	.000916		185.	1.0255	.13294	1018.6	.000932
	190.	1.0028	.12692	957.9	.000910		190.	1.0132	.12995	980.8	.000926
	195.	.9903	.12404	924.0	.000904		195.	1.0011	.12708	946.2	.000921
	200.	.9780	.12129	892.9	.000899		200.	.9891	.12432	914.5	.000915
	210.	.9539	.11614	837.8	.000890		210.	.9655	.11916	858.3	.000906
	220.	.9303	.11144	790.9	.000883		220.	.9425	.11442	810.4	.000899
	230.	.9073	.10713	750.6	.000877		230.	.9201	.11008	769.3	.000893
	240.	.8851	.10319	715.8	.000874		240.	.8983	.10608	733.7	.000889
	250.	.8634	.09957	685.6	.000872		250.	.8772	.10240	702.9	.000886
	260.	.8425	.09624	659.3	.000871		260.	.8568	.09899	676.0	.000885
	270.	.8223	.09316	636.4	.000872		270.	.8370	.09583	652.4	.000884
	280.	.8028	.09030	616.2	.000873		280.	.8178	.09289	631.8	.000884
	290.	.7839	.08765	598.5	.000875		290.	.7993	.09014	613.5	.000885
	300.	.7658	.08518	582.8	.000878		300.	.7815	.08757	597.5	.000887
	310.	.7484	.08289	569.0	.000881		310.	.7643	.08517	583.2	.000888
	320.	.7316	.08079	556.8	.000885		320.	.7478	.08296	570.6	.000891

* Two Phase Boundary

Table 6. Transport Properties of Oxygen for saturated Liquid and Vapor, Engr. Units

Temp. R	Pressure psia	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h	Temp. R	Pressure psia	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h
97.846	.021	81.5428	.11769	326.06	.00363	190.	57.250	66.2125	.07445	91.28	.00267
97.846	.021	.0007	.00236	2.44	16.54835	190.	57.250	.9847	.00574	5.37	.02249
100.	.031	81.2157	.11639	317.52	.00360	192.	62.172	65.8256	.07354	89.02	.00264
100.	.031	.0009	.00248	2.52	12.33342	192.	62.172	1.0642	.00582	5.44	.02090
102.	.043	80.9115	.11522	309.51	.00358	194.	67.349	65.4346	.07262	86.82	.00261
102.	.043	.0013	.00258	2.60	9.46578	194.	67.399	1.1484	.00591	5.51	.01944
104.	.059	80.6068	.11409	301.46	.00355	196.	72.942	65.0393	.07170	84.69	.00258
104.	.059	.0017	.00268	2.67	7.32589	196.	72.942	1.2376	.00599	5.57	.01810
106.	.079	80.3015	.11298	293.43	.00353	198.	78.812	64.6396	.07077	82.61	.00255
106.	.079	.0022	.00277	2.74	5.71802	198.	78.812	1.3320	.00608	5.64	.01686
108.	.105	79.9955	.11189	285.46	.00351	200.	85.021	64.2352	.06984	80.59	.00251
108.	.105	.0029	.00286	2.81	4.80094	200.	85.021	1.4318	.00616	5.71	.01573
110.	.139	79.6888	.11083	277.58	.00349	202.	91.580	63.8259	.06891	78.63	.00248
110.	.139	.0038	.00294	2.88	3.57259	202.	91.580	1.5374	.00625	5.78	.01468
112.	.181	79.3812	.10980	269.81	.00347	204.	98.501	63.4115	.06797	76.71	.00245
112.	.181	.0048	.00302	2.94	2.85897	204.	98.501	1.6489	.00634	5.85	.01370
114.	.234	79.0728	.10878	262.17	.00345	206.	105.794	62.9916	.06703	74.84	.00241
114.	.234	.0061	.00310	3.01	2.30614	206.	105.794	1.7666	.00643	5.92	.01280
116.	.300	78.7635	.10778	254.68	.00343	208.	113.471	62.5660	.06609	73.02	.00238
116.	.300	.0077	.00317	3.07	1.87458	208.	113.471	1.8908	.00652	5.99	.01197
118.	.380	78.4532	.10680	247.36	.00341	210.	121.545	62.1344	.06514	71.25	.00234
118.	.380	.0096	.00324	3.14	1.53514	210.	121.545	2.0218	.00662	6.07	.01119
120.	.478	78.1419	.10583	240.22	.00340	212.	130.025	61.6964	.06419	69.51	.00231
120.	.478	.0119	.00331	3.20	1.26617	212.	130.025	2.1600	.00672	6.14	.01047
122.	.597	77.8295	.10487	233.25	.00338	214.	138.926	61.2518	.06323	67.82	.00227
122.	.597	.0146	.00338	3.27	1.05152	214.	138.926	2.3056	.00682	6.22	.00979
124.	.738	77.5160	.10393	226.48	.00336	216.	148.257	60.8001	.06227	66.16	.00223
124.	.738	.0178	.00344	3.33	.87901	216.	148.257	2.4592	.00692	6.30	.00916
126.	.907	77.2014	.10299	219.89	.00334	218.	158.031	60.3409	.06130	64.54	.00219
126.	.907	.0216	.00351	3.39	.73945	218.	158.031	2.6210	.00702	6.37	.00858
128.	1.106	76.8855	.10207	213.49	.00333	220.	168.260	59.8738	.06033	62.96	.00215
128.	1.106	.0259	.00357	3.45	.62579	220.	168.260	2.7915	.00713	6.45	.00802
130.	1.340	76.5685	.10115	207.29	.00331	222.	178.957	59.3984	.05936	61.41	.00211
130.	1.340	.0309	.00364	3.51	.53265	222.	178.957	2.9712	.00724	6.54	.00751
132.	1.613	76.2501	.10024	201.27	.00329	224.	190.133	58.9141	.05837	59.89	.00207
132.	1.613	.0367	.00370	3.58	.45587	224.	190.133	3.1606	.00736	6.62	.00703
134.	1.930	75.9305	.09934	195.45	.00328	226.	201.801	58.4203	.05739	58.40	.00202
134.	1.930	.0433	.00377	3.64	.39220	226.	201.801	3.3602	.00748	6.70	.00657
136.	2.296	75.6094	.09844	189.81	.00326	228.	213.974	57.9165	.05640	56.93	.00198
136.	2.296	.0508	.00383	3.70	.33910	228.	213.974	3.5708	.00760	6.79	.00614
138.	2.717	75.2870	.09754	184.35	.00324	230.	226.664	57.4021	.05540	55.49	.00193
138.	2.717	.0593	.00390	3.76	.29458	230.	226.664	3.7928	.00773	6.88	.00574
140.	3.198	74.9631	.09666	179.07	.00322	232.	239.884	56.8763	.05440	54.08	.00189
140.	3.198	.0689	.00396	3.82	.25707	232.	239.884	4.0271	.00787	6.98	.00536
142.	3.745	74.6377	.09577	173.97	.00321	234.	253.648	56.3382	.05340	52.69	.00184
142.	3.745	.0797	.00403	3.88	.22530	234.	253.648	4.2745	.00801	7.07	.00501
144.	4.364	74.3108	.09489	169.04	.00319	236.	267.969	55.7871	.05239	51.32	.00179
144.	4.364	.0917	.00409	3.94	.19826	236.	267.969	4.5359	.00816	7.17	.00467
146.	5.063	73.9823	.09400	164.27	.00317	238.	282.860	55.2220	.05137	49.97	.00174
146.	5.063	.1051	.00416	4.00	.17515	238.	282.860	4.8124	.00832	7.27	.00435
148.	5.848	73.6521	.09312	159.66	.00315	240.	298.335	54.6417	.05035	48.64	.00169
148.	5.848	.1200	.00422	4.06	.15530	240.	298.335	5.1050	.00849	7.38	.00405

Table 6. Transport Properties of Oxygen for saturated Liquid and Vapor, Engr. Units

Temp. R	Pressure psia	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h	Temp. R	Pressure psia	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h
150.	6.727	73.3203	.09225	155.20	.00313	242.	314.410	54.0451	.04932	47.32	.00164
150.	6.727	.1364	.00429	4.12	.13819	242.	314.410	5.4150	.00867	7.49	.00376
152.	7.707	72.9867	.09137	150.90	.00311	244.	331.098	53.4307	.04830	46.02	.00159
152.	7.707	.1546	.00435	4.18	.12337	244.	331.098	5.7440	.00887	7.61	.00349
154.	8.795	72.6513	.09049	146.74	.00309	246.	348.414	52.7969	.04726	44.73	.00153
154.	8.795	.1745	.00442	4.25	.11050	246.	348.414	6.0937	.00909	7.73	.00323
156.	10.001	72.3140	.08961	142.72	.00307	248.	366.375	52.1419	.04623	43.45	.00148
156.	10.001	.1963	.00449	4.31	.09926	248.	366.375	6.4659	.00932	7.86	.00299
158.	11.332	71.9748	.08873	138.83	.00305	250.	384.997	51.4634	.04519	42.18	.00142
158.	11.332	.2202	.00456	4.37	.08943	250.	384.997	6.8631	.00958	7.99	.00275
160.	12.797	71.6336	.08786	135.07	.00303	252.	404.297	50.7590	.04416	40.92	.00136
160.	12.797	.2462	.00463	4.43	.08079	252.	404.297	7.2879	.00986	8.13	.00253
162.	14.404	71.2902	.08698	131.44	.00301	254.	424.292	50.0254	.04313	39.65	.00129
162.	14.404	.2744	.00470	4.49	.07317	254.	424.292	7.7436	.01019	8.29	.00232
164.	16.163	70.9448	.08610	127.93	.00299	256.	445.001	49.2589	.04210	38.39	.00123
164.	16.163	.3051	.00477	4.55	.06643	256.	445.001	8.2341	.01055	8.45	.00212
166.	18.083	70.5971	.08521	124.54	.00297	258.	466.444	48.4548	.04109	37.12	.00116
166.	18.083	.3382	.00484	4.61	.06046	258.	466.444	8.7645	.01096	8.63	.00192
168.	20.173	70.2471	.08433	121.25	.00295	260.	488.642	47.6069	.04009	35.85	.00109
168.	20.173	.3741	.00491	4.67	.05514	260.	488.642	9.3410	.01145	8.82	.00174
170.	22.443	69.8946	.08344	118.07	.00293	262.	511.619	46.7073	.03912	34.55	.00102
170.	22.443	.4127	.00498	4.74	.05040	262.	511.619	9.9717	.01201	9.03	.00156
172.	24.903	69.5396	.08256	115.00	.00290	264.	535.399	45.7454	.03818	33.24	.00094
172.	24.903	.4542	.00505	4.80	.04615	264.	535.399	10.6676	.01268	9.26	.00138
174.	27.562	69.1821	.08167	112.02	.00288	266.	560.010	44.7061	.03730	31.88	.00085
174.	27.562	.4988	.00513	4.86	.04234	266.	560.010	11.4439	.01349	9.52	.00120
176.	30.431	68.8217	.08077	109.14	.00285	268.	585.483	43.5671	.03651	30.48	.00076
176.	30.431	.5466	.00520	4.92	.03892	268.	585.483	12.3231	.01449	9.83	.00103
178.	33.519	68.4586	.07988	106.34	.00283	270.	611.855	42.2934	.03583	29.00	.00066
178.	33.519	.5978	.00528	4.99	.03583	270.	611.855	13.3407	.01576	10.18	.00085
180.	36.838	68.0925	.07898	103.64	.00280	272.	639.170	40.8236	.03533	27.39	.00055
180.	36.838	.6525	.00535	5.05	.03304	272.	639.170	14.5588	.01744	10.62	.00067
182.	40.397	67.7232	.07808	101.01	.00278	274.	667.486	39.0338	.03511	25.57	.00042
182.	40.397	.7109	.00543	5.11	.03052	274.	667.486	16.1040	.01975	11.20	.00048
184.	44.207	67.3508	.07718	98.47	.00275	276.	696.886	36.5919	.03533	23.29	.00025
184.	44.207	.7732	.00551	5.18	.02822	276.	696.886	18.3235	.02438	12.08	.00027
186.	48.279	66.9749	.07627	96.00	.00272	278.	727.543	31.3822	.05145	19.16	.00005
186.	48.279	.8394	.00558	5.24	.02613	278.	727.543	23.9567	.06158	14.65	.00003
188.	52.623	66.5956	.07536	93.60	.00270	278.246	731.426	27.2276			
188.	52.623	.9099	.00566	5.31	.02423	278.246	731.426	27.2276			

Table 7. Transport Properties of Oxygen, Isobars, Engr. Units.

Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h
5. psia Isobar				
* 97.653	81.5442	.11770	326.13	.00363
100.	81.2182	.11640	317.62	.00360
105.	80.4568	.11354	297.53	.00354
110.	79.6914	.11084	277.66	.00349
115.	78.9209	.10829	258.48	.00344
120.	78.1446	.10584	240.28	.00340
125.	77.3615	.10347	223.21	.00335
130.	76.5709	.10116	207.33	.00331
135.	75.7721	.09889	192.64	.00327
140.	74.9644	.09666	179.09	.00322
145.	74.1470	.09445	166.63	.00318
* 145.628	74.0106	.09408	164.67	.00317
* 145.928	.1039	.00415	4.00	.17700
150.	.1009	.00428	4.12	.18860
155.	.0975	.00443	4.27	.20294
160.	.0943	.00458	4.41	.21778
165.	.0913	.00474	4.56	.23314
170.	.0884	.00489	4.71	.24901
175.	.0860	.00505	4.85	.26540
180.	.0835	.00521	5.00	.28231
185.	.0812	.00537	5.14	.29973
190.	.0790	.00553	5.28	.31766
195.	.0770	.00569	5.43	.33610
200.	.0750	.00585	5.57	.35503
205.	.0731	.00601	5.71	.37445
210.	.0714	.00617	5.86	.39434
215.	.0697	.00634	6.00	.41471
220.	.0681	.00650	6.14	.43554
225.	.0665	.00666	6.28	.45683
230.	.0651	.00682	6.42	.47856
235.	.0637	.00698	6.56	.50073
240.	.0623	.00713	6.70	.52334
245.	.0611	.00729	6.84	.54638
250.	.0598	.00745	6.97	.56984
255.	.0586	.00761	7.11	.59373
260.	.0575	.00776	7.25	.61806
265.	.0564	.00792	7.38	.64283
270.	.0554	.00807	7.52	.66807
275.	.0543	.00823	7.65	.69384
280.	.0534	.00838	7.79	.71975
285.	.0524	.00852	7.92	.74536
290.	.0515	.00867	8.05	.77151
295.	.0506	.00881	8.18	.79811
300.	.0498	.00896	8.31	.82512
310.	.0482	.00925	8.57	.88030
320.	.0467	.00953	8.83	.93694
330.	.0452	.00981	9.09	.99499
340.	.0439	.01009	9.34	1.05442
350.	.0426	.01036	9.59	1.11519
360.	.0415	.01064	9.83	1.17728
370.	.0403	.01091	10.08	1.24069
380.	.0393	.01117	10.32	1.30539
390.	.0383	.01144	10.55	1.37137
400.	.0373	.01170	10.79	1.43861
410.	.0364	.01196	11.02	1.50710
420.	.0355	.01222	11.25	1.57683
430.	.0347	.01247	11.48	1.64779
440.	.0339	.01273	11.71	1.71996
450.	.0331	.01298	11.93	1.79332
460.	.0324	.01323	12.16	1.86787
470.	.0317	.01348	12.37	1.94359
480.	.0311	.01373	12.59	2.02046
490.	.0304	.01397	12.81	2.09847
500.	.0298	.01422	13.02	2.17761
510.	.0292	.01446	13.23	2.25784
520.	.0287	.01471	13.44	2.33917
530.	.0281	.01495	13.65	2.42157
540.	.0276	.01519	13.86	2.50501

Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h
10. psia Isobar				
* 97.860	81.5456	.11770	326.20	.00363
100.	81.2207	.11641	317.71	.00360
105.	80.4594	.11355	297.62	.00354
110.	79.6941	.11085	277.74	.00349
115.	78.9238	.10830	258.56	.00344
120.	78.1475	.10585	240.35	.00340
125.	77.3646	.10348	223.28	.00335
130.	76.5742	.10117	207.40	.00331
135.	75.7756	.09891	192.70	.00327
140.	74.9681	.09667	179.15	.00322
145.	74.1509	.09446	166.69	.00318
150.	73.3230	.09225	155.23	.00313
155.	72.4834	.09005	144.72	.00308
* 155.998	72.3143	.08961	142.72	.00308
* 155.998	.1963	.00449	4.31	.09927
160.	.1910	.00461	4.42	.10540
165.	.1848	.00477	4.57	.11327
170.	.1790	.00492	4.71	.12138
175.	.1736	.00508	4.86	.12973
180.	.1685	.00523	5.00	.13833
185.	.1637	.00539	5.15	.14717
190.	.1592	.00555	5.29	.15626
195.	.1549	.00571	5.44	.16559
200.	.1509	.00587	5.58	.17516
205.	.1471	.00603	5.72	.18496
210.	.1435	.00620	5.86	.19500
215.	.1401	.00636	6.01	.20527
220.	.1368	.00652	6.15	.21576
225.	.1337	.00668	6.29	.22648
230.	.1307	.00684	6.43	.23741
235.	.1279	.00699	6.57	.24857
240.	.1251	.00715	6.71	.25993
245.	.1225	.00731	6.84	.27151
250.	.1200	.00747	6.98	.28330
255.	.1176	.00762	7.12	.29530
260.	.1153	.00778	7.25	.30751
265.	.1131	.00793	7.39	.31995
270.	.1110	.00809	7.52	.33262
275.	.1089	.00825	7.66	.34556
280.	.1070	.00840	7.79	.35856
285.	.1051	.00854	7.93	.37140
290.	.1032	.00868	8.06	.38450
295.	.1015	.00883	8.19	.39784
300.	.0998	.00897	8.32	.41138
310.	.0965	.00926	8.58	.43903
320.	.0935	.00954	8.84	.46742
330.	.0906	.00982	9.09	.49650
340.	.0879	.01010	9.34	.52627
350.	.0854	.01038	9.59	.55672
360.	.0830	.01065	9.84	.58782
370.	.0807	.01092	10.08	.61958
380.	.0786	.01118	10.32	.65198
390.	.0766	.01145	10.56	.68502
400.	.0747	.01171	10.79	.71869
410.	.0728	.01197	11.03	.75298
420.	.0711	.01223	11.26	.78790
430.	.0694	.01248	11.49	.82342
440.	.0678	.01274	11.71	.85955
450.	.0663	.01299	11.94	.89628
460.	.0649	.01324	12.16	.93360
470.	.0635	.01349	12.38	.97150
480.	.0622	.01374	12.60	1.00998
490.	.0609	.01399	12.81	1.04903
500.	.0597	.01423	13.02	1.08864
510.	.0585	.01448	13.24	1.12880
520.	.0574	.01472	13.45	1.16950
530.	.0563	.01496	13.65	1.21074
540.	.0552	.01520	13.86	1.25250

* Two Phase Boundary

Table 7. Transport Properties of Oxygen, Isobars, Engr. Units.

	15. psia Isobar					20. psia Isobar				
	Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h	Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h
*	97.868	81.5470	.11771	326.27	.00363	* 97.875	81.5484	.11771	326.34	.00363
	100.	81.2232	.11642	317.81	.00360	100.	81.2257	.11643	317.91	.00360
	105.	80.4620	.11356	297.71	.00354	105.	80.4646	.11357	297.80	.00354
	110.	79.6968	.11086	277.82	.00349	110.	79.6995	.11087	277.90	.00349
	115.	78.9266	.10831	258.63	.00344	115.	78.9294	.10832	258.71	.00344
	120.	78.1505	.10586	240.42	.00340	120.	78.1534	.10587	240.49	.00340
	125.	77.3677	.10349	223.35	.00335	125.	77.3708	.10350	223.41	.00335
	130.	76.5774	.10118	207.46	.00331	130.	76.5807	.10119	207.52	.00331
	135.	75.7791	.09892	192.76	.00327	135.	75.7825	.09893	192.82	.00327
	140.	74.9718	.09668	179.21	.00323	140.	74.9754	.09670	179.26	.00323
	145.	74.1547	.09447	166.74	.00318	145.	74.1586	.09448	166.79	.00318
	150.	73.3271	.09227	155.29	.00313	150.	73.3312	.09228	155.34	.00313
	155.	72.4878	.09007	144.76	.00309	155.	72.4922	.09008	144.81	.00309
	160.	71.6356	.08786	135.09	.00303	160.	71.6403	.08788	135.14	.00304
*	162.698	71.1700	.08667	130.20	.00301	165.	70.7741	.08566	126.25	.00298
*	162.698	.2848	.00472	4.51	.07073	* 167.840	70.2751	.08440	121.51	.00295
	165.	.2804	.00479	4.58	.07322	* 167.840	.3711	.00490	4.67	.05554
	170.	.2713	.00495	4.72	.07875	170.	.3657	.00497	4.73	.05738
	175.	.2628	.00510	4.87	.08442	175.	.3539	.00512	4.88	.06173
	180.	.2549	.00526	5.01	.09026	180.	.3430	.00528	5.02	.06618
	185.	.2475	.00542	5.16	.09624	185.	.3328	.00544	5.17	.07074
	190.	.2406	.00557	5.30	.10239	190.	.3232	.00559	5.31	.07541
	195.	.2340	.00573	5.44	.10868	195.	.3142	.00575	5.45	.08019
	200.	.2278	.00589	5.59	.11513	200.	.3057	.00591	5.59	.08509
	205.	.2220	.00605	5.73	.12174	205.	.2977	.00607	5.74	.09009
	210.	.2164	.00621	5.87	.12849	210.	.2901	.00623	5.88	.09520
	215.	.2112	.00637	6.01	.13539	215.	.2830	.00639	6.02	.10043
	220.	.2062	.00653	6.15	.14244	220.	.2762	.00655	6.16	.10575
	225.	.2014	.00669	6.29	.14964	225.	.2697	.00671	6.30	.11119
	230.	.1968	.00685	6.43	.15697	230.	.2636	.00687	6.44	.11673
	235.	.1925	.00701	6.57	.16445	235.	.2577	.00703	6.58	.12237
	240.	.1884	.00717	6.71	.17207	240.	.2521	.00718	6.72	.12812
	245.	.1844	.00733	6.85	.17983	245.	.2467	.00734	6.86	.13397
	250.	.1806	.00748	6.99	.18773	250.	.2416	.00750	6.99	.13993
	255.	.1770	.00764	7.12	.19577	255.	.2367	.00765	7.13	.14599
	260.	.1735	.00779	7.26	.20395	260.	.2320	.00781	7.27	.15215
	265.	.1701	.00795	7.40	.21228	265.	.2275	.00796	7.40	.15842
	270.	.1669	.00810	7.53	.22076	270.	.2231	.00812	7.54	.16481
	275.	.1638	.00826	7.66	.22942	275.	.2190	.00828	7.67	.17133
	280.	.1608	.00841	7.80	.23812	280.	.2149	.00843	7.80	.17788
	285.	.1580	.00856	7.93	.24670	285.	.2111	.00857	7.94	.18433
	290.	.1552	.00870	8.06	.25546	290.	.2073	.00871	8.07	.19092
	295.	.1525	.00884	8.19	.26437	295.	.2037	.00886	8.20	.19762
	300.	.1499	.00899	8.32	.27342	300.	.2003	.00900	8.33	.20442
	310.	.1450	.00927	8.58	.29190	310.	.1937	.00929	8.59	.21832
	320.	.1404	.00956	8.84	.31087	320.	.1875	.00957	8.85	.23258
	330.	.1361	.00984	9.09	.33030	330.	.1817	.00985	9.10	.24718
	340.	.1320	.01012	9.35	.35019	340.	.1763	.01013	9.35	.26213
	350.	.1282	.01039	9.59	.37052	350.	.1712	.01040	9.60	.27740
	360.	.1246	.01066	9.84	.39129	360.	.1664	.01067	9.84	.29301
	370.	.1212	.01093	10.08	.41250	370.	.1618	.01094	10.09	.30894
	380.	.1180	.01120	10.32	.43413	380.	.1575	.01121	10.33	.32520
	390.	.1150	.01146	10.56	.45619	390.	.1534	.01147	10.57	.34177
	400.	.1121	.01172	10.80	.47867	400.	.1495	.01173	10.80	.35865
	410.	.1093	.01198	11.03	.50157	410.	.1458	.01199	11.03	.37585
	420.	.1067	.01224	11.26	.52488	420.	.1423	.01225	11.26	.39335
	430.	.1042	.01250	11.49	.54859	430.	.1390	.01251	11.49	.41116
	440.	.1018	.01275	11.72	.57271	440.	.1358	.01276	11.72	.42927
	450.	.0995	.01300	11.94	.59722	450.	.1328	.01301	11.94	.44767
	460.	.0974	.01325	12.16	.62213	460.	.1299	.01326	12.16	.46638
	470.	.0953	.01350	12.38	.64743	470.	.1271	.01351	12.38	.48537
	480.	.0933	.01375	12.60	.67311	480.	.1244	.01376	12.60	.50465
	490.	.0914	.01400	12.81	.69917	490.	.1219	.01401	12.82	.52422
	500.	.0895	.01424	13.03	.72560	500.	.1194	.01425	13.03	.54406
	510.	.0878	.01449	13.24	.75240	510.	.1171	.01450	13.24	.56418
	520.	.0861	.01473	13.45	.77956	520.	.1148	.01474	13.45	.58457
	530.	.0845	.01497	13.66	.80708	530.	.1126	.01498	13.66	.60523
	540.	.0829	.01522	13.86	.83494	540.	.1105	.01523	13.86	.62614

* Two Phase Boundary

Table 7. Transport Properties of Oxygen, Isobars, Engr. Units.

	25. psia Isobar					30. psia Isobar				
	Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h	Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h
*	97.882	81.5498	.11772	326.42	.00363	97.889	81.5512	.11772	326.49	.00363
	100.	81.2282	.11644	318.00	.00360	100.	81.2307	.11645	318.10	.00360
	105.	80.4672	.11358	297.89	.00354	105.	80.4698	.11358	297.97	.00354
	110.	79.7022	.11088	277.99	.00349	110.	79.7049	.11089	278.07	.00349
	115.	78.9322	.10833	258.78	.00344	115.	78.9350	.10834	258.86	.00344
	120.	78.1564	.10588	240.57	.00340	120.	78.1593	.10589	240.64	.00340
	125.	77.3739	.10351	223.48	.00335	125.	77.3770	.10352	223.55	.00336
	130.	76.5840	.10120	207.58	.00331	130.	76.5873	.10121	207.65	.00331
	135.	75.7860	.09894	192.88	.00327	135.	75.7894	.09895	192.93	.00327
	140.	74.9791	.09671	179.32	.00323	140.	74.9828	.09672	179.37	.00323
	145.	74.1625	.09450	166.85	.00318	145.	74.1664	.09451	166.90	.00318
	150.	73.3354	.09230	155.39	.00314	150.	73.3395	.09231	155.44	.00314
	155.	72.4966	.09010	144.85	.00309	155.	72.5010	.09011	144.91	.00309
	160.	71.6450	.08789	135.19	.00304	160.	71.6496	.08791	135.23	.00304
	165.	70.7791	.08568	126.29	.00298	165.	70.7841	.08569	126.34	.00298
	170.	69.8973	.08345	118.10	.00293	170.	69.9027	.08347	118.14	.00293
*	172.076	69.5261	.08252	114.88	.00290	175.	69.0034	.08122	110.58	.00287
*	172.076	.4558	.00506	4.80	.04600	* 175.709	68.8743	.08090	109.55	.00286
	175.	.4470	.00515	4.89	.04808	* 175.709	.5395	.00519	4.92	.03940
	180.	.4327	.00530	5.03	.05171	180.	.5242	.00532	5.04	.04204
	185.	.4195	.00546	5.17	.05541	185.	.5077	.00548	5.18	.04518
	190.	.4071	.00561	5.32	.05920	190.	.4924	.00563	5.33	.04838
	195.	.3955	.00577	5.46	.06308	195.	.4781	.00579	5.47	.05166
	200.	.3846	.00593	5.60	.06704	200.	.4646	.00595	5.61	.05499
	205.	.3744	.00609	5.74	.07109	205.	.4520	.00611	5.75	.05840
	210.	.3647	.00625	5.89	.07522	210.	.4401	.00627	5.89	.06186
	215.	.3556	.00641	6.03	.07943	215.	.4289	.00643	6.03	.06542
	220.	.3469	.00657	6.17	.08373	220.	.4183	.00658	6.18	.06903
	225.	.3387	.00673	6.31	.08811	225.	.4082	.00674	6.32	.07271
	230.	.3308	.00688	6.45	.09257	230.	.3987	.00690	6.45	.07645
	235.	.3234	.00704	6.59	.09711	235.	.3896	.00706	6.59	.08026
	240.	.3163	.00720	6.72	.10174	240.	.3809	.00721	6.73	.08414
	245.	.3095	.00736	6.86	.10645	245.	.3727	.00737	6.87	.08808
	250.	.3030	.00751	7.00	.11123	250.	.3648	.00753	7.01	.09210
	255.	.2968	.00767	7.14	.11610	255.	.3572	.00768	7.14	.09617
	260.	.2908	.00782	7.27	.12106	260.	.3500	.00784	7.28	.10032
	265.	.2851	.00798	7.41	.12610	265.	.3431	.00799	7.41	.10454
	270.	.2796	.00813	7.54	.13123	270.	.3364	.00815	7.55	.10884
	275.	.2744	.00829	7.68	.13647	275.	.3300	.00830	7.68	.11322
	280.	.2693	.00844	7.81	.14173	280.	.3239	.00846	7.81	.11762
	285.	.2644	.00858	7.94	.14690	285.	.3180	.00860	7.95	.12194
	290.	.2597	.00873	8.07	.15219	290.	.3123	.00874	8.08	.12636
	295.	.2552	.00887	8.20	.15754	295.	.3068	.00888	8.21	.13085
	300.	.2508	.00901	8.33	.16302	300.	.3015	.00903	8.34	.13541
	310.	.2425	.00930	8.59	.17416	310.	.2915	.00931	8.60	.14472
	320.	.2347	.00958	8.85	.18559	320.	.2821	.00959	8.85	.15426
	330.	.2275	.00986	9.10	.19730	330.	.2733	.00987	9.11	.16404
	340.	.2206	.01014	9.35	.20928	340.	.2651	.01015	9.36	.17405
	350.	.2142	.01041	9.60	.22153	350.	.2573	.01043	9.61	.18427
	360.	.2082	.01068	9.85	.23404	360.	.2500	.01070	9.85	.19471
	370.	.2024	.01095	10.09	.24680	370.	.2432	.01096	10.09	.20537
	380.	.1970	.01122	10.33	.25983	380.	.2366	.01123	10.33	.21624
	390.	.1919	.01148	10.57	.27310	390.	.2305	.01149	10.57	.22732
	400.	.1870	.01174	10.80	.28663	400.	.2246	.01176	10.81	.23861
	410.	.1824	.01200	11.04	.30040	410.	.2191	.01201	11.04	.25010
	420.	.1780	.01226	11.27	.31442	420.	.2138	.01227	11.27	.26180
	430.	.1739	.01252	11.50	.32869	430.	.2087	.01253	11.50	.27371
	440.	.1699	.01277	11.72	.34319	440.	.2039	.01278	11.72	.28581
	450.	.1661	.01302	11.95	.35794	450.	.1994	.01303	11.95	.29811
	460.	.1624	.01327	12.17	.37292	460.	.1950	.01328	12.17	.31061
	470.	.1589	.01352	12.39	.38813	470.	.1908	.01353	12.39	.32330
	480.	.1556	.01377	12.60	.40357	480.	.1868	.01378	12.61	.33618
	490.	.1524	.01402	12.82	.41924	490.	.1829	.01403	12.82	.34925
	500.	.1493	.01426	13.03	.43513	500.	.1792	.01427	13.03	.36250
	510.	.1464	.01451	13.24	.45124	510.	.1757	.01452	13.25	.37594
	520.	.1435	.01475	13.45	.46757	520.	.1723	.01476	13.46	.38956
	530.	.1408	.01499	13.66	.48411	530.	.1690	.01500	13.66	.40336
	540.	.1382	.01524	13.87	.50086	540.	.1659	.01525	13.87	.41732

* Two Phase Boundary

Table 7. Transport Properties of Oxygen, Isobars, Engr. Units.

	35. psia Isobar					40. psia Isobar				
	Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h	Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h
*	97.896	81.5526	.11773	326.56	.00363	* 97.903	81.5540	.11773	326.63	.00363
	100.	81.2333	.11646	318.20	.00360	100.	81.2358	.11647	318.29	.00360
	105.	80.4723	.11359	298.06	.00354	105.	80.4749	.11360	298.15	.00354
	110.	79.7076	.11090	278.15	.00349	110.	79.7103	.11091	278.23	.00349
	115.	78.9379	.10835	258.94	.00344	115.	78.9407	.10836	259.01	.00344
	120.	78.1623	.10590	240.71	.00340	120.	78.1653	.10591	240.78	.00340
	125.	77.3801	.10353	223.61	.00336	125.	77.3832	.10354	223.68	.00336
	130.	76.5906	.10123	207.71	.00331	130.	76.5938	.10124	207.77	.00331
	135.	75.7929	.09896	192.99	.00327	135.	75.7964	.09898	193.05	.00327
	140.	74.9864	.09673	179.43	.00323	140.	74.9901	.09675	179.48	.00323
	145.	74.1703	.09452	166.95	.00318	145.	74.1742	.09454	167.00	.00318
	150.	73.3436	.09232	155.49	.00314	150.	73.3477	.09234	155.54	.00314
	155.	72.5053	.09012	144.96	.00309	155.	72.5097	.09014	145.00	.00309
	160.	71.6543	.08792	135.28	.00304	160.	71.6590	.08794	135.33	.00304
	165.	70.7891	.08571	126.38	.00298	165.	70.7940	.08573	126.43	.00298
	170.	69.9080	.08348	118.18	.00293	170.	69.9133	.08350	118.23	.00293
	175.	69.0091	.08124	110.62	.00287	175.	69.0149	.08126	110.66	.00287
*	178.910	68.2924	.07947	105.10	.00282	180.	68.0963	.07899	103.66	.00280
*	178.910	.6223	.00531	5.02	.03453	* 181.784	67.7633	.07818	101.29	.00278
	180.	.6177	.00534	5.05	.03512	* 181.784	.7044	.00542	5.11	.03078
	185.	.5977	.00550	5.19	.03785	185.	.6893	.00552	5.20	.03235
	190.	.5791	.00565	5.33	.04064	190.	.6674	.00567	5.34	.03482
	195.	.5619	.00581	5.48	.04348	195.	.6470	.00583	5.49	.03734
	200.	.5458	.00597	5.62	.04638	200.	.6280	.00599	5.63	.03991
	205.	.5306	.00613	5.76	.04933	205.	.6103	.00614	5.77	.04252
	210.	.5165	.00628	5.90	.05234	210.	.5937	.00630	5.91	.04518
	215.	.5031	.00644	6.04	.05540	215.	.5781	.00646	6.05	.04788
	220.	.4904	.00660	6.18	.05852	220.	.5633	.00662	6.19	.05064
	225.	.4785	.00676	6.32	.06170	225.	.5494	.00677	6.33	.05344
	230.	.4671	.00692	6.46	.06493	230.	.5362	.00693	6.47	.05629
	235.	.4563	.00707	6.60	.06822	235.	.5237	.00709	6.61	.05918
	240.	.4461	.00723	6.74	.07156	240.	.5118	.00725	6.74	.06213
	245.	.4363	.00739	6.88	.07496	245.	.5004	.00740	6.88	.06512
	250.	.4270	.00754	7.01	.07842	250.	.4896	.00756	7.02	.06816
	255.	.4181	.00770	7.15	.08193	255.	.4793	.00771	7.15	.07125
	260.	.4095	.00785	7.28	.08550	260.	.4694	.00787	7.29	.07439
	265.	.4014	.00801	7.42	.08914	265.	.4600	.00802	7.43	.07758
	270.	.3935	.00816	7.55	.09284	270.	.4509	.00818	7.56	.08083
	275.	.3860	.00832	7.69	.09662	275.	.4422	.00833	7.69	.08415
	280.	.3788	.00847	7.82	.10040	280.	.4339	.00848	7.83	.08748
	285.	.3718	.00861	7.95	.10411	285.	.4258	.00862	7.96	.09074
	290.	.3651	.00875	8.08	.10791	290.	.4181	.00877	8.09	.09406
	295.	.3586	.00890	8.21	.11176	295.	.4107	.00891	8.22	.09745
	300.	.3524	.00904	8.35	.11568	300.	.4035	.00905	8.35	.10089
	310.	.3406	.00932	8.60	.12368	310.	.3900	.00934	8.61	.10790
	320.	.3296	.00961	8.86	.13188	320.	.3773	.00962	8.86	.11510
	330.	.3193	.00989	9.11	.14028	330.	.3655	.00990	9.12	.12246
	340.	.3097	.01016	9.36	.14888	340.	.3544	.01017	9.37	.13000
	350.	.3006	.01044	9.61	.15766	350.	.3439	.01045	9.62	.13769
	360.	.2920	.01071	9.86	.16662	360.	.3341	.01072	9.86	.14555
	370.	.2840	.01098	10.10	.17577	370.	.3248	.01099	10.10	.15357
	380.	.2763	.01124	10.34	.18511	380.	.3161	.01125	10.34	.16175
	390.	.2691	.01151	10.58	.19462	390.	.3078	.01152	10.58	.17009
	400.	.2623	.01177	10.81	.20431	400.	.2999	.01178	10.81	.17858
	410.	.2557	.01203	11.04	.21417	410.	.2925	.01204	11.05	.18722
	420.	.2496	.01228	11.27	.22422	420.	.2854	.01229	11.28	.19602
	430.	.2437	.01254	11.50	.23443	430.	.2786	.01255	11.51	.20497
	440.	.2381	.01279	11.73	.24482	440.	.2722	.01280	11.73	.21407
	450.	.2327	.01304	11.95	.25537	450.	.2661	.01305	11.95	.22332
	460.	.2276	.01329	12.17	.26610	460.	.2602	.01330	12.18	.23271
	470.	.2227	.01354	12.39	.27698	470.	.2546	.01355	12.39	.24225
	480.	.2180	.01379	12.61	.28804	480.	.2492	.01380	12.61	.25193
	490.	.2135	.01404	12.82	.29925	490.	.2441	.01405	12.83	.26175
	500.	.2092	.01428	13.04	.31062	500.	.2391	.01429	13.04	.27171
	510.	.2050	.01453	13.25	.32215	510.	.2344	.01454	13.25	.28181
	520.	.2011	.01477	13.46	.33384	520.	.2298	.01478	13.46	.29204
	530.	.1972	.01501	13.67	.34567	530.	.2255	.01502	13.67	.30241
	540.	.1935	.01526	13.87	.35766	540.	.2212	.01527	13.87	.31290

* Two Phase Boundary

Table 7. Transport Properties of Oxygen, Isobars, Engr. Units.

	45. psia Isobar					50. psia Isobar				
	Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h	Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h
*	97.910	81.5554	.11774	326.71	.00363	* 97.918	81.5567	.11774	326.78	.00363
	100.	81.2383	.11648	318.39	.00360	100.	81.2408	.11649	318.49	.00360
	105.	80.4775	.11361	298.24	.00354	105.	80.4801	.11362	298.33	.00354
	110.	79.7130	.11092	278.31	.00349	110.	79.7156	.11093	278.40	.00349
	115.	78.9435	.10837	259.09	.00344	115.	78.9463	.10838	259.16	.00344
	120.	78.1682	.10592	240.85	.00340	120.	78.1712	.10593	240.92	.00340
	125.	77.3863	.10355	223.74	.00336	125.	77.3894	.10356	223.81	.00336
	130.	76.5971	.10125	207.83	.00331	130.	76.6004	.10126	207.90	.00331
	135.	75.7998	.09899	193.11	.00327	135.	75.8033	.09900	193.17	.00327
	140.	74.9937	.09676	179.54	.00323	140.	74.9974	.09677	179.60	.00323
	145.	74.1780	.09455	167.06	.00318	145.	74.1819	.09456	167.11	.00318
	150.	73.3518	.09235	155.59	.00314	150.	73.3559	.09236	155.64	.00314
	155.	72.5141	.09015	145.05	.00309	155.	72.5185	.09017	145.10	.00309
	160.	71.6636	.08795	135.37	.00304	160.	71.6683	.08797	135.42	.00304
	165.	70.7990	.08574	126.47	.00298	165.	70.8040	.08576	126.51	.00299
	170.	69.9187	.08352	118.27	.00293	170.	69.9240	.08353	118.31	.00293
	175.	69.0206	.08128	110.70	.00287	175.	69.0263	.08129	110.74	.00287
	180.	68.1025	.07901	103.70	.00280	180.	68.1087	.07903	103.74	.00281
*	184.400	67.2759	.07700	97.97	.00274	185.	67.1683	.07674	97.25	.00274
*	184.400	.7861	.00552	5.19	.02779	* 186.808	66.8221	.07591	95.02	.00271
	185.	.7829	.00554	5.21	.02805	* 186.808	.8674	.00562	5.27	.02534
	190.	.7572	.00569	5.35	.03029	190.	.8488	.00571	5.36	.02665
	195.	.7336	.00585	5.49	.03256	195.	.8216	.00587	5.50	.02872
	200.	.7116	.00601	5.64	.03487	200.	.7964	.00602	5.64	.03083
	205.	.6911	.00616	5.78	.03721	205.	.7730	.00618	5.79	.03296
	210.	.6719	.00632	5.92	.03960	210.	.7511	.00634	5.93	.03513
	215.	.6539	.00648	6.06	.04203	215.	.7306	.00649	6.07	.03734
	220.	.6370	.00663	6.20	.04450	220.	.7114	.00665	6.21	.03958
	225.	.6210	.00679	6.34	.04701	225.	.6933	.00681	6.34	.04186
	230.	.6059	.00695	6.48	.04956	230.	.6762	.00696	6.48	.04417
	235.	.5915	.00710	6.61	.05215	235.	.6600	.00712	6.62	.04652
	240.	.5779	.00726	6.75	.05478	240.	.6446	.00728	6.76	.04890
	245.	.5650	.00742	6.89	.05746	245.	.6300	.00743	6.90	.05132
	250.	.5527	.00757	7.03	.06017	250.	.6162	.00759	7.03	.05378
	255.	.5409	.00773	7.16	.06293	255.	.6029	.00774	7.17	.05628
	260.	.5297	.00788	7.30	.06574	260.	.5903	.00790	7.30	.05882
	265.	.5189	.00804	7.43	.06859	265.	.5782	.00805	7.44	.06140
	270.	.5086	.00819	7.57	.07150	270.	.5666	.00820	7.57	.06402
	275.	.4987	.00835	7.70	.07446	275.	.5555	.00836	7.70	.06670
	280.	.4893	.00850	7.83	.07743	280.	.5449	.00851	7.84	.06939
	285.	.4801	.00864	7.96	.08033	285.	.5347	.00865	7.97	.07200
	290.	.4714	.00878	8.10	.08330	290.	.5249	.00879	8.10	.07468
	295.	.4630	.00892	8.23	.08631	295.	.5154	.00893	8.23	.07740
	300.	.4548	.00906	8.36	.08938	300.	.5063	.00908	8.36	.08017
	310.	.4395	.00935	8.61	.09563	310.	.4891	.00936	8.62	.08581
	320.	.4251	.00963	8.87	.10204	320.	.4731	.00964	8.87	.09159
	330.	.4117	.00991	9.12	.10860	330.	.4581	.00992	9.13	.09751
	340.	.3992	.01019	9.37	.11531	340.	.4441	.01020	9.38	.10356
	350.	.3874	.01046	9.62	.12217	350.	.4309	.01047	9.62	.10974
	360.	.3763	.01073	9.86	.12917	360.	.4185	.01074	9.87	.11605
	370.	.3658	.01100	10.11	.13631	370.	.4068	.01101	10.11	.12249
	380.	.3559	.01126	10.35	.14359	380.	.3958	.01127	10.35	.12905
	390.	.3465	.01153	10.58	.15101	390.	.3854	.01154	10.59	.13574
	400.	.3377	.01179	10.82	.15857	400.	.3755	.01180	10.82	.14256
	410.	.3293	.01205	11.05	.16626	410.	.3661	.01206	11.05	.14949
	420.	.3213	.01230	11.28	.17409	420.	.3572	.01231	11.28	.15655
	430.	.3136	.01256	11.51	.18206	430.	.3487	.01257	11.51	.16372
	440.	.3064	.01281	11.73	.19015	440.	.3406	.01282	11.74	.17102
	450.	.2995	.01306	11.96	.19838	450.	.3329	.01307	11.96	.17844
	460.	.2928	.01331	12.18	.20674	460.	.3255	.01332	12.18	.18597
	470.	.2865	.01356	12.40	.21523	470.	.3185	.01357	12.40	.19361
	480.	.2805	.01381	12.61	.22384	480.	.3117	.01382	12.62	.20138
	490.	.2747	.01406	12.83	.23258	490.	.3053	.01407	12.83	.20925
	500.	.2691	.01430	13.04	.24145	500.	.2991	.01431	13.05	.21723
	510.	.2638	.01455	13.25	.25043	510.	.2931	.01456	13.26	.22533
	520.	.2586	.01479	13.46	.25953	520.	.2874	.01480	13.47	.23353
	530.	.2537	.01503	13.67	.26876	530.	.2819	.01504	13.67	.24183
	540.	.2489	.01528	13.88	.27809	540.	.2767	.01529	13.88	.25024

* Two Phase Boundary

Table 7. Transport Properties of Oxygen, Isobars, Engr. Units.

	100. psia Isobar					150. psia Isobar				
	Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h	Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h
*	97.989	81.5707	.11779	327.50	.00363	* 98.060	81.5846	.11784	328.22	.00363
	100.	81.2658	.11658	319.45	.00361	100.	81.2908	.11667	320.42	.00361
	105.	80.5060	.11372	299.22	.00355	105.	80.5318	.11381	300.11	.00355
	110.	79.7425	.11103	279.22	.00349	110.	79.7694	.11112	280.04	.00350
	115.	78.9744	.10848	259.93	.00345	115.	79.0025	.10858	260.69	.00345
	120.	78.2006	.10603	241.63	.00340	120.	78.2301	.10614	242.34	.00341
	125.	77.4204	.10367	224.48	.00336	125.	77.4514	.10378	225.14	.00336
	130.	76.6331	.10137	208.52	.00332	130.	76.6657	.10148	209.14	.00332
	135.	75.8378	.09912	193.76	.00328	135.	75.8722	.09923	194.35	.00328
	140.	75.0339	.09689	180.15	.00323	140.	75.0703	.09702	180.71	.00324
	145.	74.2206	.09469	167.64	.00319	145.	74.2591	.09482	168.17	.00319
	150.	73.3970	.09250	156.14	.00314	150.	73.4379	.09263	156.64	.00315
	155.	72.5621	.09031	145.58	.00310	155.	72.6055	.09045	146.06	.00310
	160.	71.7147	.08811	135.88	.00304	160.	71.7610	.08826	136.35	.00305
	165.	70.8536	.08591	126.96	.00299	165.	70.9029	.08606	127.41	.00300
	170.	69.9770	.08370	118.75	.00294	170.	70.0298	.08386	119.18	.00294
	175.	69.0832	.08146	111.17	.00288	175.	69.1398	.08163	111.59	.00288
	180.	68.1699	.07921	104.16	.00281	180.	68.2308	.07939	104.57	.00282
	185.	67.2345	.07693	97.66	.00275	185.	67.3002	.07712	98.07	.00276
	190.	66.2739	.07462	91.62	.00268	190.	66.3451	.07482	92.02	.00269
	195.	65.2842	.07229	85.99	.00260	195.	65.3618	.07250	86.39	.00261
	200.	64.2609	.06991	80.71	.00252	200.	64.3459	.07014	81.11	.00253
*	204.420	63.3238	.06778	76.31	.00244	205.	63.2921	.06774	76.16	.00244
*	204.420	1.6730	.00636	5.87	.01351	210.	62.1936	.06529	71.48	.00235
	205.	1.6659	.00638	5.88	.01365	215.	61.0419	.06279	67.04	.00225
	210.	1.6075	.00652	6.02	.01487	* 216.364	60.7172	.06209	65.87	.00222
	215.	1.5543	.00667	6.16	.01609	* 216.364	2.4880	.00694	6.31	.00905
	220.	1.5055	.00683	6.29	.01732	220.	2.4174	.00704	6.41	.00973
	225.	1.4605	.00698	6.43	.01857	225.	2.3293	.00718	6.54	.01065
	230.	1.4187	.00713	6.57	.01982	230.	2.2499	.00732	6.67	.01156
	235.	1.3798	.00728	6.70	.02108	235.	2.1775	.00747	6.80	.01248
	240.	1.3434	.00743	6.84	.02236	240.	2.1111	.00762	6.93	.01340
	245.	1.3093	.00759	6.97	.02365	245.	2.0498	.00776	7.07	.01433
	250.	1.2771	.00774	7.11	.02495	250.	1.9929	.00791	7.20	.01526
	255.	1.2468	.00789	7.24	.02627	255.	1.9399	.00806	7.33	.01620
	260.	1.2180	.00804	7.38	.02761	260.	1.8903	.00821	7.46	.01714
	265.	1.1908	.00820	7.51	.02897	265.	1.8438	.00837	7.59	.01810
	270.	1.1649	.00835	7.64	.03035	270.	1.7999	.00852	7.72	.01908
	275.	1.1403	.00851	7.77	.03176	275.	1.7585	.00868	7.85	.02007
	280.	1.1168	.00866	7.90	.03316	280.	1.7193	.00883	7.98	.02105
	285.	1.0943	.00879	8.03	.03450	285.	1.6821	.00895	8.11	.02196
	290.	1.0729	.00893	8.16	.03587	290.	1.6467	.00908	8.24	.02290
	295.	1.0523	.00907	8.29	.03727	295.	1.6130	.00921	8.36	.02386
	300.	1.0326	.00921	8.42	.03869	300.	1.5808	.00935	8.49	.02484
	310.	.9955	.00948	8.68	.04158	310.	1.5207	.00962	8.74	.02682
	320.	.9612	.00976	8.93	.04455	320.	1.4656	.00989	8.99	.02884
	330.	.9294	.01004	9.18	.04757	330.	1.4147	.01016	9.24	.03091
	340.	.8997	.01031	9.43	.05066	340.	1.3675	.01043	9.48	.03301
	350.	.8720	.01058	9.67	.05382	350.	1.3237	.01070	9.73	.03516
	360.	.8460	.01085	9.92	.05703	360.	1.2828	.01096	9.97	.03734
	370.	.8216	.01112	10.16	.06030	370.	1.2446	.01123	10.21	.03956
	380.	.7986	.01138	10.39	.06364	380.	1.2087	.01149	10.44	.04182
	390.	.7770	.01164	10.63	.06703	390.	1.1750	.01175	10.68	.04412
	400.	.7565	.01190	10.86	.07049	400.	1.1432	.01201	10.91	.04646
	410.	.7371	.01216	11.09	.07401	410.	1.1132	.01226	11.14	.04884
	420.	.7188	.01242	11.32	.07758	420.	1.0849	.01252	11.36	.05125
	430.	.7013	.01267	11.55	.08121	430.	1.0580	.01277	11.59	.05370
	440.	.6847	.01292	11.77	.08491	440.	1.0324	.01302	11.81	.05619
	450.	.6689	.01317	11.99	.08866	450.	1.0082	.01327	12.03	.05872
	460.	.6539	.01342	12.21	.09246	460.	.9850	.01352	12.25	.06129
	470.	.6395	.01367	12.43	.09633	470.	.9630	.01377	12.47	.06389
	480.	.6257	.01392	12.65	.10025	480.	.9420	.01402	12.68	.06653
	490.	.6126	.01417	12.86	.10422	490.	.9219	.01426	12.90	.06921
	500.	.6000	.01441	13.07	.10825	500.	.9027	.01451	13.11	.07192
	510.	.5879	.01465	13.28	.11234	510.	.8842	.01475	13.32	.07467
	520.	.5763	.01490	13.49	.11647	520.	.8666	.01499	13.52	.07745
	530.	.5652	.01514	13.70	.12066	530.	.8496	.01523	13.73	.08026
	540.	.5545	.01538	13.90	.12490	540.	.8334	.01547	13.93	.08311

* Two Phase Boundary

Table 7. Transport Properties of Oxygen, Isobars, Engr. Units.

200. psia Isobar					250. psia Isobar				
Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h	Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h
* 98.131	81.5985	.11788	328.94	.00364	* 98.202	81.6124	.11793	329.65	.00364
100.	81.3157	.11676	321.39	.00361	100.	81.3406	.11685	322.36	.00361
105.	80.5575	.11390	301.00	.00355	105.	80.5832	.11400	301.89	.00355
110.	79.7962	.11122	280.86	.00350	110.	79.8229	.11132	281.68	.00350
115.	79.0304	.10868	261.45	.00345	115.	79.0583	.10878	262.22	.00346
120.	78.2594	.10624	243.05	.00341	120.	78.2886	.10634	243.76	.00341
125.	77.4822	.10389	225.80	.00337	125.	77.5130	.10399	226.47	.00337
130.	76.6982	.10160	209.77	.00333	130.	76.7305	.10171	210.39	.00333
135.	75.9065	.09935	194.93	.00328	135.	75.9407	.09947	195.52	.00329
140.	75.1065	.09714	181.26	.00324	140.	75.1427	.09726	181.82	.00325
145.	74.2975	.09494	168.69	.00320	145.	74.3357	.09507	169.22	.00320
150.	73.4785	.09276	157.15	.00315	150.	73.5191	.09290	157.65	.00316
155.	72.6487	.09059	146.55	.00311	155.	72.6918	.09072	147.03	.00311
160.	71.8070	.08841	136.81	.00306	160.	71.8527	.08855	137.27	.00306
165.	70.9519	.08622	127.85	.00301	165.	71.0007	.08637	128.30	.00301
170.	70.0822	.08402	119.61	.00295	170.	70.1343	.08418	120.04	.00296
175.	69.1960	.08180	112.01	.00289	175.	69.2518	.08197	112.43	.00290
180.	68.2912	.07957	104.98	.00283	180.	68.3511	.07974	105.39	.00284
185.	67.3654	.07731	98.47	.00277	185.	67.4300	.07749	98.87	.00277
190.	66.4157	.07502	92.42	.00270	190.	66.4856	.07522	92.82	.00271
195.	65.4386	.07271	86.78	.00262	195.	65.5147	.07292	87.18	.00263
200.	64.4300	.07036	81.51	.00254	200.	64.5131	.07058	81.90	.00255
205.	63.3847	.06797	76.56	.00246	205.	63.4761	.06821	76.95	.00247
210.	62.2963	.06554	71.88	.00237	210.	62.3976	.06580	72.29	.00238
215.	61.1570	.06306	67.46	.00227	215.	61.2702	.06334	67.87	.00228
220.	59.9563	.06052	63.23	.00216	220.	60.0842	.06082	63.66	.00218
225.	58.6805	.05791	59.17	.00205	225.	58.8269	.05824	59.62	.00207
* 225.697	58.4958	.05754	58.62	.00203	230.	57.4811	.05557	55.71	.00195
* 225.697	3.3293	.00746	6.69	.00664	* 233.478	56.4800	.05366	53.05	.00185
230.	3.2074	.00757	6.80	.00731	* 233.478	4.2086	.00797	7.05	.00510
235.	3.0819	.00770	6.92	.00807	235.	4.1454	.00800	7.08	.00531
240.	2.9701	.00784	7.05	.00883	240.	3.9584	.00812	7.20	.00600
245.	2.8694	.00798	7.18	.00959	245.	3.7962	.00824	7.31	.00667
250.	2.7778	.00812	7.30	.01035	250.	3.6532	.00837	7.43	.00734
255.	2.6939	.00826	7.43	.01110	255.	3.5253	.00851	7.55	.00799
260.	2.6165	.00841	7.56	.01186	260.	3.4098	.00865	7.68	.00865
265.	2.5448	.00856	7.69	.01263	265.	3.3044	.00879	7.80	.00931
270.	2.4780	.00872	7.81	.01341	270.	3.2076	.00895	7.92	.00998
275.	2.4155	.00888	7.94	.01420	275.	3.1182	.00912	8.04	.01066
280.	2.3569	.00903	8.07	.01497	280.	3.0352	.00926	8.17	.01132
285.	2.3016	.00913	8.19	.01568	285.	2.9577	.00934	8.29	.01189
290.	2.2495	.00925	8.32	.01640	290.	2.8852	.00944	8.41	.01249
295.	2.2002	.00937	8.44	.01714	295.	2.8171	.00955	8.53	.01310
300.	2.1533	.00950	8.57	.01789	300.	2.7528	.00967	8.66	.01372
310.	2.0665	.00976	8.82	.01942	310.	2.6346	.00992	8.90	.01498
320.	1.9874	.01002	9.06	.02098	320.	2.5281	.01017	9.14	.01626
330.	1.9150	.01029	9.31	.02257	330.	2.4313	.01043	9.38	.01756
340.	1.8483	.01055	9.55	.02418	340.	2.3428	.01069	9.62	.01888
350.	1.7867	.01082	9.79	.02582	350.	2.2615	.01095	9.86	.02022
360.	1.7295	.01108	10.03	.02749	360.	2.1863	.01121	10.09	.02158
370.	1.6762	.01134	10.26	.02919	370.	2.1166	.01146	10.32	.02296
380.	1.6264	.01160	10.50	.03091	380.	2.0518	.01172	10.56	.02436
390.	1.5797	.01186	10.73	.03266	390.	1.9912	.01197	10.78	.02579
400.	1.5358	.01212	10.96	.03444	400.	1.9344	.01223	11.01	.02723
410.	1.4945	.01237	11.19	.03625	410.	1.8811	.01248	11.24	.02870
420.	1.4555	.01262	11.41	.03808	420.	1.8309	.01273	11.46	.03019
430.	1.4187	.01288	11.63	.03995	430.	1.7835	.01298	11.68	.03169
440.	1.3837	.01313	11.86	.04184	440.	1.7387	.01323	11.90	.03322
450.	1.3506	.01338	12.07	.04376	450.	1.6963	.01348	12.12	.03478
460.	1.3191	.01362	12.29	.04570	460.	1.6560	.01373	12.34	.03635
470.	1.2891	.01387	12.51	.04767	470.	1.6177	.01397	12.55	.03794
480.	1.2605	.01412	12.72	.04967	480.	1.5813	.01422	12.76	.03956
490.	1.2332	.01436	12.93	.05170	490.	1.5465	.01446	12.97	.04120
500.	1.2071	.01460	13.14	.05375	500.	1.5134	.01470	13.18	.04285
510.	1.1822	.01485	13.35	.05583	510.	1.4817	.01494	13.39	.04453
520.	1.1583	.01509	13.56	.05793	520.	1.4514	.01518	13.59	.04623
530.	1.1354	.01533	13.76	.06006	530.	1.4224	.01542	13.80	.04794
540.	1.1134	.01557	13.97	.06222	540.	1.3945	.01566	14.00	.04968

* Two Phase Boundary

Table 7. Transport Properties of Oxygen, Isobars, Engr. Units.

	300. psia Isobar					350. psia Isobar				
	Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h	Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h
*	98.274	81.6263	.11798	330.37	.00364	* 98.345	81.6401	.11803	331.09	.00364
	100.	81.3654	.11695	323.33	.00362	100.	81.3902	.11704	324.31	.00362
	105.	80.6089	.11409	302.78	.00356	105.	80.6345	.11418	303.68	.00356
	110.	79.8495	.11141	282.51	.00351	110.	79.8761	.11151	283.33	.00351
	115.	79.0862	.10887	262.98	.00346	115.	79.1140	.10897	263.74	.00346
	120.	78.3178	.10645	244.47	.00342	120.	78.3469	.10655	245.19	.00342
	125.	77.5436	.10410	227.13	.00337	125.	77.5742	.10421	227.80	.00338
	130.	76.7628	.10182	211.01	.00333	130.	76.7950	.10193	211.64	.00334
	135.	75.9747	.09958	196.11	.00329	135.	76.0087	.09970	195.70	.00330
	140.	75.1786	.09738	182.38	.00325	140.	75.2145	.09750	182.93	.00326
	145.	74.3738	.09520	169.75	.00321	145.	74.4118	.09532	170.28	.00321
	150.	73.5594	.09303	158.15	.00316	150.	73.5996	.09316	158.65	.00317
	155.	72.7346	.09086	147.51	.00312	155.	72.7773	.09100	147.99	.00312
	160.	71.8983	.08870	137.73	.00307	160.	71.9436	.08884	138.19	.00307
	165.	71.0493	.08652	128.74	.00302	165.	71.0975	.08667	129.19	.00302
	170.	70.1861	.08434	120.47	.00296	170.	70.2376	.08450	120.90	.00297
	175.	69.3072	.08214	112.84	.00291	175.	69.3624	.08230	113.26	.00291
	180.	68.4107	.07992	105.80	.00285	180.	68.4698	.08009	106.20	.00286
	185.	67.4941	.07768	99.27	.00278	185.	67.5578	.07786	99.67	.00279
	190.	66.5550	.07541	93.21	.00271	190.	66.6237	.07561	93.61	.00272
	195.	65.5900	.07312	87.57	.00264	195.	65.6645	.07333	87.96	.00265
	200.	64.5953	.07080	82.29	.00257	200.	64.6766	.07102	82.68	.00258
	205.	63.5663	.06845	77.35	.00248	205.	63.6555	.06868	77.74	.00250
	210.	62.4974	.06605	72.68	.00240	210.	62.5958	.06630	73.08	.00241
	215.	61.3815	.06361	68.27	.00230	215.	61.4910	.06388	68.58	.00232
	220.	60.2096	.06111	64.08	.00220	220.	60.3326	.06140	64.49	.00222
	225.	58.9699	.05856	60.06	.00209	225.	59.1098	.05887	60.49	.00211
	230.	57.6468	.05593	56.18	.00197	230.	57.8081	.05627	56.63	.00200
	235.	56.2178	.05320	52.39	.00184	235.	55.4075	.05359	52.88	.00187
	240.	54.6495	.05036	48.66	.00169	240.	54.8784	.05081	49.19	.00173
*	240.211	54.5797	.05024	48.50	.00169	245.	53.1743	.04788	45.50	.00157
*	240.211	5.1368	.00851	7.39	.00402	* 246.180	52.7390	.04717	44.62	.00153
	245.	4.8799	.00859	7.49	.00463	* 246.180	6.1261	.00911	7.74	.00321
	250.	4.6541	.00870	7.59	.00526	250.	5.8451	.00914	7.80	.00359
	255.	4.4598	.00881	7.70	.00587	255.	5.5400	.00922	7.89	.00428
	260.	4.2891	.00894	7.82	.00647	260.	5.2845	.00932	7.99	.00486
	265.	4.1371	.00908	7.93	.00707	265.	5.0645	.00945	8.09	.00543
	270.	4.0001	.00923	8.05	.00767	270.	4.8715	.00959	8.20	.00599
	275.	3.8756	.00941	8.16	.00829	275.	4.6997	.00977	8.30	.00657
	280.	3.7614	.00954	8.28	.00887	280.	4.5449	.00989	8.41	.00711
	285.	3.6561	.00959	8.40	.00936	285.	4.4042	.00989	8.52	.00754
	290.	3.5585	.00966	8.52	.00987	290.	4.2753	.00993	8.64	.00799
	295.	3.4676	.00976	8.64	.01039	295.	4.1564	.01000	8.75	.00845
	300.	3.3825	.00986	8.75	.01092	300.	4.0462	.01008	8.86	.00892
	310.	3.2275	.01009	8.99	.01200	310.	3.8476	.01029	9.09	.00988
	320.	3.0892	.01033	9.23	.01310	320.	3.6726	.01051	9.32	.01085
	330.	2.9648	.01058	9.46	.01421	330.	3.5167	.01074	9.55	.01183
	340.	2.8518	.01083	9.70	.01534	340.	3.3763	.01098	9.78	.01281
	350.	2.7487	.01108	9.93	.01648	350.	3.2489	.01123	10.01	.01381
	360.	2.6538	.01134	10.16	.01764	360.	3.1325	.01147	10.24	.01483
	370.	2.5663	.01159	10.39	.01881	370.	3.0255	.01172	10.46	.01585
	380.	2.4851	.01184	10.62	.02000	380.	2.9268	.01197	10.69	.01689
	390.	2.4096	.01209	10.85	.02121	390.	2.8352	.01222	10.91	.01793
	400.	2.3390	.01235	11.07	.02243	400.	2.7499	.01247	11.13	.01900
	410.	2.2730	.01260	11.29	.02367	410.	2.6703	.01271	11.35	.02007
	420.	2.2109	.01284	11.51	.02492	420.	2.5957	.01296	11.57	.02116
	430.	2.1525	.01309	11.73	.02619	430.	2.5256	.01321	11.79	.02227
	440.	2.0973	.01334	11.95	.02748	440.	2.4596	.01345	12.01	.02339
	450.	2.0452	.01359	12.17	.02879	450.	2.3973	.01369	12.22	.02452
	460.	1.9958	.01383	12.38	.03012	460.	2.3384	.01394	12.43	.02567
	470.	1.9489	.01407	12.59	.03146	470.	2.2826	.01418	12.64	.02683
	480.	1.9043	.01432	12.81	.03282	480.	2.2296	.01442	12.85	.02801
	490.	1.8619	.01456	13.01	.03419	490.	2.1792	.01466	13.06	.02920
	500.	1.8214	.01480	13.22	.03559	500.	2.1312	.01490	13.27	.03040
	510.	1.7828	.01504	13.43	.03700	510.	2.0854	.01514	13.47	.03162
	520.	1.7459	.01528	13.63	.03842	520.	2.0417	.01538	13.67	.03285
	530.	1.7106	.01552	13.83	.03986	530.	2.0000	.01562	13.87	.03410
	540.	1.6767	.01576	14.04	.04132	540.	1.9600	.01585	14.07	.03535

* Two Phase Boundary

Table 7. Transport Properties of Oxygen, Isobars, Engr. Units.

	400. psia Isobar					450. psia Isobar				
	Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h	Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h
*	98.416	81.6540	.11808	331.80	.00364	* 98.487	81.6678	.11812	332.51	.00364
	100.	81.4150	.11713	325.28	.00362	100.	81.4397	.11722	326.26	.00362
	105.	80.6600	.11426	304.57	.00356	105.	80.6855	.11437	305.47	.00357
	110.	79.9027	.11161	284.16	.00351	110.	79.9292	.11170	284.98	.00351
	115.	79.1417	.10907	264.51	.00347	115.	79.1693	.10917	265.27	.00347
	120.	78.3760	.10665	245.90	.00342	120.	78.4049	.10675	246.61	.00343
	125.	77.6047	.10431	228.46	.00338	125.	77.6351	.10442	229.13	.00339
	130.	76.8271	.10204	212.26	.00334	130.	76.8591	.10215	212.89	.00335
	135.	76.0425	.09981	197.28	.00330	135.	76.0763	.09993	197.87	.00330
	140.	75.2502	.09762	183.49	.00326	140.	75.2859	.09774	184.04	.00326
	145.	74.4495	.09545	170.80	.00322	145.	74.4872	.09558	171.33	.00322
	150.	73.6397	.09329	159.16	.00317	150.	73.6795	.09342	159.66	.00318
	155.	72.8197	.09114	148.46	.00313	155.	72.8620	.09128	148.94	.00313
	160.	71.9887	.08898	138.65	.00308	160.	72.0336	.08913	139.11	.00309
	165.	71.1455	.08682	129.63	.00303	165.	71.1933	.08697	130.07	.00304
	170.	70.2889	.08465	121.33	.00298	170.	70.3398	.08481	121.76	.00298
	175.	69.4171	.08247	113.68	.00292	175.	69.4715	.08263	114.09	.00293
	180.	68.5285	.08027	106.61	.00286	180.	68.5868	.08044	107.02	.00287
	185.	67.6209	.07805	100.07	.00280	185.	67.6836	.07823	100.47	.00281
	190.	66.6919	.07580	94.00	.00273	190.	66.7594	.07599	94.39	.00274
	195.	65.7384	.07353	88.35	.00266	195.	65.8116	.07374	88.73	.00267
	200.	64.7570	.07124	83.07	.00259	200.	64.8366	.07145	83.46	.00260
	205.	63.7436	.06891	78.13	.00251	205.	63.8306	.06914	78.51	.00252
	210.	62.6929	.06654	73.47	.00242	210.	62.7886	.06679	73.86	.00244
	215.	61.5988	.06414	69.08	.00233	215.	61.7049	.06440	69.47	.00235
	220.	60.4534	.06169	64.90	.00224	220.	60.5720	.06197	65.31	.00225
	225.	59.2466	.05918	60.91	.00213	225.	59.3805	.05949	61.33	.00215
	230.	57.9552	.05662	57.08	.00202	230.	58.1184	.05695	57.52	.00204
	235.	56.5911	.05397	53.36	.00190	235.	56.7692	.05434	53.82	.00192
	240.	55.0982	.05123	49.71	.00176	240.	55.3098	.05165	50.21	.00179
	245.	53.4464	.04838	46.08	.00161	245.	53.7052	.04885	46.64	.00165
	250.	51.5673	.04537	42.38	.00143	250.	51.8986	.04592	43.02	.00148
*	251.561	50.9160	.04439	41.19	.00137	255.	49.7834	.04282	39.26	.00128
*	251.561	7.1921	.00980	8.10	.00258	* 256.473	49.0725	.04186	38.09	.00121
	255.	6.8492	.00979	8.14	.00301	* 256.473	8.3557	.01064	8.49	.00207
	260.	6.4474	.00984	8.20	.00359	260.	7.8824	.01058	8.49	.00252
	265.	6.1209	.00993	8.28	.00416	265.	7.3666	.01058	8.53	.00311
	270.	5.8456	.01005	8.37	.00471	270.	6.9605	.01067	8.59	.00367
	275.	5.6077	.01023	8.47	.00527	275.	6.6252	.01083	8.67	.00423
	280.	5.3984	.01033	8.57	.00578	280.	6.3396	.01089	8.75	.00472
	285.	5.2115	.01025	8.67	.00616	285.	6.0909	.01070	8.84	.00508
	290.	5.0428	.01024	8.77	.00657	290.	5.8708	.01063	8.93	.00546
	295.	4.8893	.01028	8.88	.00699	295.	5.6735	.01061	9.03	.00585
	300.	4.7485	.01034	8.99	.00742	300.	5.4948	.01064	9.13	.00624
	310.	4.4979	.01051	9.21	.00828	310.	5.1817	.01076	9.34	.00703
	320.	4.2802	.01071	9.43	.00915	320.	4.9142	.01092	9.55	.00783
	330.	4.0883	.01092	9.65	.01003	330.	4.6811	.01112	9.76	.00864
	340.	3.9170	.01115	9.87	.01092	340.	4.4751	.01133	9.97	.00945
	350.	3.7628	.01138	10.10	.01181	350.	4.2910	.01155	10.19	.01026
	360.	3.6227	.01162	10.32	.01272	360.	4.1249	.01178	10.41	.01108
	370.	3.4946	.01186	10.54	.01363	370.	3.9738	.01201	10.63	.01190
	380.	3.3768	.01211	10.76	.01455	380.	3.8356	.01225	10.84	.01274
	390.	3.2681	.01235	10.98	.01548	390.	3.7084	.01248	11.06	.01358
	400.	3.1671	.01259	11.20	.01643	400.	3.5908	.01272	11.27	.01443
	410.	3.0732	.01284	11.42	.01738	410.	3.4816	.01296	11.49	.01529
	420.	2.9853	.01308	11.63	.01835	420.	3.3798	.01320	11.70	.01616
	430.	2.9030	.01332	11.85	.01933	430.	3.2846	.01344	11.91	.01704
	440.	2.8256	.01356	12.06	.02032	440.	3.1954	.01368	12.12	.01793
	450.	2.7528	.01381	12.27	.02132	450.	3.1114	.01392	12.33	.01883
	460.	2.6839	.01405	12.48	.02233	460.	3.0323	.01416	12.54	.01974
	470.	2.6188	.01429	12.69	.02336	470.	2.9576	.01440	12.75	.02066
	480.	2.5571	.01453	12.90	.02440	480.	2.8868	.01463	12.95	.02159
	490.	2.4985	.01477	13.11	.02545	490.	2.8197	.01487	13.16	.02254
	500.	2.4427	.01500	13.31	.02651	500.	2.7560	.01511	13.36	.02349
	510.	2.3896	.01524	13.51	.02759	510.	2.6953	.01534	13.56	.02445
	520.	2.3389	.01548	13.72	.02867	520.	2.6375	.01558	13.76	.02543
	530.	2.2905	.01571	13.92	.02977	530.	2.5823	.01581	13.96	.02641
	540.	2.2443	.01595	14.11	.03088	540.	2.5296	.01605	14.16	.02740

* Two Phase Boundary

Table 7. Transport Properties of Oxygen, Isobars, Engr. Units.

500. psia Isobar					600. psia Isobar				
Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h	Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h
* 98.558	81.6816	.11817	333.23	.00364	* 98.700	81.7091	.11827	334.65	.00365
100.	81.4644	.11731	327.24	.00363	100.	81.5136	.11749	329.20	.00363
105.	80.7110	.11446	306.36	.00357	105.	80.7617	.11465	308.16	.00357
110.	79.9556	.11180	285.81	.00352	110.	80.0083	.11199	287.47	.00352
115.	79.1969	.10927	266.04	.00347	115.	79.2519	.10947	267.57	.00348
120.	78.4338	.10686	247.32	.00343	120.	78.4913	.10706	248.75	.00344
125.	77.6654	.10453	229.80	.00339	125.	77.7258	.10474	231.13	.00340
130.	76.8910	.10226	213.51	.00335	130.	76.9546	.10248	214.76	.00336
135.	76.1099	.10005	198.46	.00331	135.	76.1768	.10028	199.63	.00332
140.	75.3214	.09786	184.60	.00327	140.	75.3920	.09810	185.71	.00328
145.	74.5247	.09570	171.85	.00323	145.	74.5993	.09595	172.91	.00324
150.	73.7192	.09355	160.16	.00318	150.	73.7982	.09382	161.16	.00319
155.	72.9041	.09141	149.42	.00314	155.	72.9877	.09169	150.38	.00315
160.	72.0783	.08927	139.57	.00309	160.	72.1670	.08956	140.48	.00310
165.	71.2408	.08712	130.51	.00304	165.	71.3351	.08742	131.39	.00306
170.	70.3904	.08497	122.18	.00299	170.	70.4909	.08528	123.03	.00300
175.	69.5256	.08280	114.51	.00294	175.	69.6328	.08312	115.33	.00295
180.	68.6447	.08061	107.42	.00288	180.	68.7594	.08095	108.22	.00289
185.	67.7458	.07841	100.86	.00282	185.	67.8688	.07877	101.65	.00283
190.	66.8265	.07619	94.78	.00275	190.	66.9589	.07656	95.55	.00277
195.	65.8841	.07394	89.12	.00268	195.	66.0271	.07434	89.88	.00270
200.	64.9154	.07166	83.84	.00261	200.	65.0706	.07209	84.60	.00263
205.	63.9166	.06936	78.89	.00253	205.	64.0857	.06981	79.65	.00256
210.	62.8831	.06703	74.25	.00245	210.	63.0685	.06750	75.01	.00248
215.	61.8094	.06466	69.86	.00236	215.	62.0139	.06517	70.64	.00239
220.	60.6885	.06225	65.71	.00227	220.	60.9158	.06279	66.50	.00230
225.	59.5118	.05979	61.75	.00217	225.	59.7666	.06038	62.56	.00221
230.	58.2680	.05728	57.95	.00206	230.	58.5569	.05792	58.79	.00210
235.	56.9422	.05470	54.28	.00195	235.	57.2741	.05540	55.17	.00199
240.	55.5138	.05205	50.70	.00182	240.	55.9016	.05283	51.65	.00188
245.	53.9523	.04931	47.18	.00168	245.	54.4157	.05018	48.21	.00175
250.	52.2097	.04645	43.64	.00152	250.	52.7814	.04745	44.79	.00160
255.	50.2008	.04345	40.00	.00134	255.	50.9415	.04462	41.34	.00144
260.	47.7433	.04027	36.06	.00111	260.	48.7905	.04169	37.74	.00125
* 260.997	47.1654	.03960	35.20	.00105	265.	46.0857	.03865	33.76	.00101
* 260.997	9.6481	.01171	8.92	.00165	* 269.110	42.8802	.03611	29.67	.00071
265.	8.9281	.01154	8.87	.00218	* 269.110	12.8674	.01516	10.02	.00093
270.	8.2842	.01151	8.88	.00278	270.	12.4497	.01491	9.93	.00110
275.	7.7930	.01163	8.91	.00336	275.	10.9554	.01435	9.67	.00186
280.	7.3951	.01161	8.97	.00386	280.	10.0494	.01386	9.59	.00244
285.	7.0604	.01126	9.04	.00420	285.	9.3905	.01291	9.57	.00281
290.	6.7718	.01109	9.12	.00456	290.	8.8712	.01238	9.59	.00316
295.	6.5182	.01101	9.20	.00492	295.	8.4425	.01208	9.63	.00351
300.	6.2922	.01099	9.29	.00529	300.	8.0777	.01190	9.68	.00385
310.	5.9033	.01104	9.48	.00604	310.	7.4798	.01175	9.81	.00453
320.	5.5771	.01117	9.67	.00678	320.	7.0014	.01176	9.97	.00519
330.	5.2967	.01134	9.88	.00752	330.	6.6037	.01184	10.15	.00585
340.	5.0516	.01153	10.08	.00827	340.	6.2644	.01197	10.33	.00650
350.	4.8344	.01173	10.29	.00902	350.	5.9692	.01214	10.52	.00716
360.	4.6397	.01195	10.50	.00977	360.	5.7087	.01232	10.72	.00781
370.	4.4636	.01217	10.72	.01052	370.	5.4760	.01252	10.91	.00846
380.	4.3033	.01240	10.93	.01129	380.	5.2662	.01272	11.11	.00912
390.	4.1564	.01263	11.14	.01206	390.	5.0756	.01294	11.31	.00978
400.	4.0210	.01286	11.35	.01283	400.	4.9012	.01315	11.52	.01045
410.	3.8956	.01309	11.56	.01362	410.	4.7409	.01337	11.72	.01112
420.	3.7792	.01333	11.77	.01441	420.	4.5926	.01360	11.92	.01180
430.	3.6705	.01357	11.98	.01521	430.	4.4550	.01382	12.12	.01248
440.	3.5688	.01380	12.19	.01602	440.	4.3268	.01405	12.32	.01317
450.	3.4734	.01404	12.39	.01684	450.	4.2069	.01428	12.52	.01387
460.	3.3835	.01427	12.60	.01767	460.	4.0944	.01451	12.73	.01457
470.	3.2988	.01451	12.80	.01851	470.	3.9887	.01474	12.92	.01528
480.	3.2187	.01474	13.01	.01935	480.	3.8890	.01497	13.12	.01600
490.	3.1429	.01498	13.21	.02021	490.	3.7948	.01520	13.32	.01672
500.	3.0709	.01521	13.41	.02107	500.	3.7057	.01543	13.52	.01746
510.	3.0024	.01545	13.61	.02195	510.	3.6211	.01566	13.71	.01819
520.	2.9373	.01568	13.81	.02283	520.	3.5407	.01589	13.91	.01894
530.	2.8752	.01591	14.01	.02372	530.	3.4642	.01612	14.10	.01969
540.	2.8159	.01614	14.20	.02462	540.	3.3913	.01634	14.30	.02045

* Two Phase Boundary

Table 7. Transport Properties of Oxygen, Isobars, Engr. Units.

700. psia Isobar					800. psia Isobar				
Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h	Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h
* 98.841	81.7366	.11836	336.07	.00365					
100.	81.5627	.11768	331.17	.00364	* 98.983	81.7640	.11846	337.48	.00365
105.	80.8123	.11484	309.96	.00358	100.	81.6116	.11786	333.14	.00364
110.	80.0608	.11218	289.13	.00353	105.	80.8627	.11502	311.77	.00358
115.	79.3066	.10966	269.11	.00348	110.	80.1130	.11237	290.79	.00353
120.	78.5486	.10726	250.18	.00344	115.	79.3610	.10986	270.65	.00349
125.	77.7859	.10495	232.46	.00340	120.	78.6056	.10747	251.61	.00345
130.	77.0177	.10270	216.01	.00336	125.	77.8456	.10516	233.80	.00341
135.	76.2433	.10050	200.81	.00332	130.	77.0805	.10292	217.26	.00337
140.	75.4621	.09834	186.81	.00329	135.	76.3094	.10073	201.98	.00333
145.	74.6734	.09620	173.96	.00325	140.	75.5317	.09858	187.92	.00329
150.	73.8765	.09407	162.16	.00320	145.	74.7469	.09645	175.01	.00325
155.	73.0706	.09196	151.33	.00316	150.	73.9541	.09433	163.15	.00321
160.	72.2549	.08984	141.39	.00311	155.	73.1528	.09223	152.28	.00317
165.	71.4285	.08772	132.27	.00307	160.	72.3420	.09012	142.31	.00313
170.	70.5902	.08559	123.88	.00302	165.	71.5209	.08801	133.15	.00308
175.	69.7387	.08345	116.15	.00297	170.	70.6884	.08589	124.72	.00303
180.	68.8726	.08129	109.02	.00291	175.	69.8434	.08377	116.97	.00298
185.	67.9901	.07912	102.43	.00285	180.	68.9843	.08163	109.82	.00292
190.	67.0892	.07694	96.32	.00279	185.	68.1096	.07948	103.21	.00287
195.	66.1676	.07473	90.64	.00272	190.	67.2175	.07731	97.08	.00281
200.	65.2227	.07250	85.35	.00265	195.	66.3057	.07512	91.39	.00274
205.	64.2511	.07025	80.41	.00258	200.	65.3719	.07291	86.10	.00267
210.	63.2493	.06797	75.77	.00250	205.	64.4130	.07068	81.15	.00260
215.	62.2126	.06566	71.40	.00242	210.	63.4258	.06843	76.51	.00253
220.	61.1358	.06332	67.27	.00233	215.	62.4060	.06615	72.15	.00245
225.	60.0121	.06095	63.35	.00224	220.	61.3491	.06384	68.03	.00236
230.	58.8334	.05854	59.61	.00214	225.	60.2490	.06151	64.13	.00228
235.	57.5892	.05608	56.03	.00204	230.	59.0988	.05914	60.41	.00218
240.	56.2658	.05357	52.56	.00193	235.	57.8895	.05673	56.86	.00208
245.	54.8446	.05100	49.19	.00181	240.	56.6097	.05428	53.44	.00198
250.	53.2990	.04837	45.87	.00168	245.	55.2445	.05178	50.12	.00186
255.	51.5887	.04567	42.55	.00153	250.	53.7733	.04924	46.88	.00174
260.	49.6466	.04292	39.18	.00137	255.	52.1667	.04665	43.67	.00161
265.	47.3439	.04014	35.62	.00118	260.	50.3789	.04403	40.45	.00147
270.	44.3657	.03748	31.59	.00093	265.	48.3327	.04141	37.15	.00130
275.	39.2588	.03552	25.84	.00049	270.	45.8756	.03895	33.64	.00112
* 276.207	36.2669	.03538	23.01	.00023	275.	42.6214	.03706	29.58	.00088
* 276.207	18.6292	.02519	12.20	.00025	280.	36.7353	.03573	23.59	.00044
280.	14.5246	.01883	10.87	.00109	285.	19.7566	.02479	12.96	.00052
285.	12.7045	.01587	10.46	.00165	290.	15.8101	.01837	11.62	.00112
290.	11.6137	.01447	10.30	.00208	295.	14.0453	.01628	11.18	.00157
295.	10.8277	.01368	10.23	.00245	300.	12.9002	.01514	10.97	.00195
300.	10.2126	.01320	10.21	.00279	310.	11.3817	.01398	10.81	.00261
310.	9.2795	.01270	10.24	.00344	320.	10.3546	.01346	10.80	.00321
320.	8.5813	.01250	10.34	.00406	330.	9.5818	.01323	10.86	.00377
330.	8.0254	.01246	10.47	.00466	340.	8.9649	.01315	10.97	.00432
340.	7.5651	.01251	10.62	.00525	350.	8.4535	.01317	11.09	.00486
350.	7.1734	.01261	10.79	.00584	360.	8.0181	.01324	11.24	.00539
360.	6.8336	.01275	10.96	.00642	370.	7.6401	.01335	11.40	.00591
370.	6.5341	.01291	11.14	.00700	380.	7.3071	.01349	11.56	.00644
380.	6.2671	.01308	11.32	.00758	390.	7.0101	.01365	11.73	.00697
390.	6.0266	.01327	11.51	.00817	400.	6.7427	.01382	11.91	.00749
400.	5.8084	.01347	11.70	.00875	410.	6.5000	.01401	12.09	.00802
410.	5.6090	.01368	11.89	.00934	420.	6.2783	.01420	12.27	.00855
420.	5.4257	.01389	12.09	.00994	430.	6.0744	.01440	12.45	.00909
430.	5.2564	.01410	12.28	.01054	440.	5.8862	.01460	12.64	.00963
440.	5.0993	.01432	12.47	.01114	450.	5.7115	.01481	12.83	.01017
450.	4.9530	.01454	12.67	.01175	460.	5.5488	.01502	13.01	.01072
460.	4.8163	.01476	12.86	.01236	470.	5.3968	.01523	13.20	.01127
470.	4.6881	.01498	13.06	.01298	480.	5.2542	.01545	13.39	.01183
480.	4.5676	.01520	13.25	.01361	490.	5.1202	.01567	13.57	.01239
490.	4.4541	.01543	13.44	.01424	500.	4.9939	.01588	13.76	.01295
500.	4.3468	.01565	13.64	.01488	510.	4.8747	.01610	13.95	.01352
510.	4.2453	.01588	13.83	.01552	520.	4.7617	.01632	14.13	.01410
520.	4.1490	.01610	14.02	.01617	530.	4.6546	.01654	14.32	.01468
530.	4.0575	.01632	14.21	.01682	540.	4.5528	.01676	14.51	.01526
540.	3.9704	.01655	14.40	.01748	530.	3.4642	.01612	14.10	.01969

* Two Phase Boundary

Table 7. Transport Properties of Oxygen, Isobars, Engr. Units.

Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h
900. psia Isobar				
* 99.124	81.7913	.11856	338.89	.00366
100.	81.6603	.11804	335.12	.00364
105.	80.9128	.11520	313.58	.00359
110.	80.1650	.11256	292.45	.00354
115.	79.4152	.11005	272.19	.00350
120.	78.6622	.10767	253.04	.00346
125.	77.9050	.10537	235.13	.00342
130.	77.1429	.10314	218.51	.00338
135.	76.3750	.10096	203.16	.00334
140.	75.6009	.09881	189.03	.00330
145.	74.8198	.09669	176.05	.00326
150.	74.0312	.09459	164.15	.00322
155.	73.2343	.09249	153.23	.00318
160.	72.4283	.09040	143.21	.00314
165.	71.6124	.08830	134.02	.00309
170.	70.7856	.08620	125.57	.00304
175.	69.9468	.08409	117.79	.00299
180.	69.0946	.08196	110.61	.00294
185.	68.2275	.07982	103.98	.00288
190.	67.3438	.07767	97.84	.00282
195.	66.4415	.07550	92.14	.00276
200.	65.5184	.07331	86.83	.00270
205.	64.5716	.07111	81.88	.00263
210.	63.5982	.06888	77.24	.00255
215.	62.5945	.06663	72.89	.00248
220.	61.5561	.06435	68.78	.00239
225.	60.4780	.06205	64.89	.00231
230.	59.3540	.05972	61.20	.00222
235.	58.1764	.05736	57.67	.00212
240.	56.9358	.05496	54.28	.00202
245.	55.6198	.05252	51.01	.00191
250.	54.2123	.05006	47.83	.00180
255.	52.6910	.04756	44.71	.00168
260.	51.0234	.04504	41.62	.00155
265.	49.1592	.04255	38.50	.00141
270.	47.0117	.04020	35.29	.00125
275.	44.4095	.03833	31.82	.00108
280.	40.9258	.03677	27.82	.00085
285.	34.9783	.03361	22.25	.00049
290.	24.6816	.02799	15.47	.00047
295.	19.1098	.02005	13.03	.00085
300.	16.5667	.01818	12.20	.00126
310.	13.9113	.01573	11.58	.00195
320.	12.3714	.01466	11.38	.00254
330.	11.2964	.01417	11.34	.00308
340.	10.4760	.01391	11.37	.00360
350.	9.8158	.01381	11.45	.00410
360.	9.2658	.01380	11.56	.00459
370.	8.7960	.01385	11.68	.00508
380.	8.3872	.01394	11.82	.00556
390.	8.0263	.01406	11.98	.00604
400.	7.7041	.01420	12.14	.00652
410.	7.4137	.01436	12.30	.00700
420.	7.1499	.01453	12.47	.00749
430.	6.9087	.01471	12.64	.00797
440.	6.6868	.01490	12.82	.00846
450.	6.4818	.01510	13.00	.00895
460.	6.2915	.01530	13.17	.00945
470.	6.1142	.01550	13.35	.00994
480.	5.9484	.01570	13.53	.01045
490.	5.7929	.01591	13.72	.01095
500.	5.6467	.01612	13.90	.01146
510.	5.5089	.01633	14.08	.01197
520.	5.3786	.01654	14.26	.01249
530.	5.2553	.01676	14.44	.01301
540.	5.1383	.01697	14.62	.01354
1000. psia Isobar				
* 99.265	81.8186	.11865	340.29	.00366
100.	81.7089	.11822	337.10	.00365
105.	80.9628	.11539	315.39	.00359
110.	80.2168	.11274	294.12	.00355
115.	79.4692	.11025	273.73	.00350
120.	78.7186	.10787	254.47	.00346
125.	77.9641	.10558	236.47	.00342
130.	77.2049	.10336	219.76	.00339
135.	76.4403	.10118	204.33	.00335
140.	75.6696	.09905	190.14	.00331
145.	74.8923	.09694	177.10	.00327
150.	74.1077	.09484	165.14	.00323
155.	73.3151	.09276	154.18	.00319
160.	72.5139	.09068	144.12	.00315
165.	71.7031	.08859	134.89	.00310
170.	70.8818	.08650	126.41	.00306
175.	70.0491	.08440	118.60	.00301
180.	69.2035	.08229	111.40	.00295
185.	68.3438	.08017	104.75	.00290
190.	67.4683	.07803	98.59	.00284
195.	66.5751	.07588	92.88	.00278
200.	65.6622	.07371	87.57	.00271
205.	64.7270	.07153	82.61	.00265
210.	63.7668	.06932	77.97	.00258
215.	62.7782	.06710	73.61	.00250
220.	61.7574	.06485	69.51	.00242
225.	60.6998	.06258	65.64	.00234
230.	59.6001	.06028	61.96	.00225
235.	58.4515	.05796	58.45	.00216
240.	57.2462	.05561	55.10	.00206
245.	55.9739	.05324	51.87	.00196
250.	54.6216	.05083	48.74	.00186
255.	53.1722	.04841	45.69	.00174
260.	51.6018	.04598	42.69	.00162
265.	49.8755	.04359	39.71	.00150
270.	47.9392	.04133	36.69	.00136
275.	45.7002	.03946	33.56	.00122
280.	42.9802	.03780	30.20	.00106
285.	39.3766	.03506	26.35	.00082
290.	33.9561	.03206	21.60	.00058
295.	26.9862	.02757	16.95	.00058
300.	21.9062	.02290	14.43	.00080
310.	17.0491	.01816	12.69	.00143
320.	14.6948	.01625	12.13	.00201
330.	13.1961	.01531	11.92	.00254
340.	12.1109	.01482	11.85	.00303
350.	11.2667	.01456	11.86	.00351
360.	10.5796	.01444	11.92	.00397
370.	10.0029	.01441	12.01	.00442
380.	9.5077	.01444	12.12	.00487
390.	9.0752	.01451	12.25	.00531
400.	8.6923	.01462	12.38	.00576
410.	8.3495	.01474	12.53	.00620
420.	8.0401	.01489	12.69	.00664
430.	7.7585	.01505	12.85	.00709
440.	7.5007	.01522	13.01	.00753
450.	7.2633	.01540	13.18	.00798
460.	7.0437	.01558	13.35	.00844
470.	6.8398	.01577	13.52	.00889
480.	6.6496	.01597	13.69	.00935
490.	6.4716	.01617	13.87	.00981
500.	6.3046	.01637	14.04	.01027
510.	6.1475	.01657	14.22	.01074
520.	5.9994	.01678	14.39	.01121
530.	5.8593	.01698	14.57	.01169
540.	5.7266	.01719	14.74	.01216

* Two Phase Boundary

Table 7. Transport Properties of Oxygen, Isobars, Engr. Units.

	1100. psia Isobar					1200. psia Isobar				
	Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h	Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h
*	99.406	81.8458	.11875	341.69	.00366	* 99.547	81.8729	.11885	343.09	.00366
	100.	81.7573	.11840	339.09	.00365	100.	81.8055	.11858	341.09	.00366
	105.	81.0126	.11557	317.21	.00360	105.	81.0622	.11575	319.03	.00360
	110.	80.2684	.11293	295.79	.00355	110.	80.3198	.11312	297.47	.00356
	115.	79.5229	.11044	275.27	.00351	115.	79.5763	.11064	276.82	.00351
	120.	78.7747	.10807	255.90	.00347	120.	78.8305	.10827	257.34	.00347
	125.	78.0229	.10579	237.80	.00343	125.	78.0814	.10599	239.14	.00344
	130.	77.2666	.10357	221.01	.00339	130.	77.3279	.10379	222.26	.00340
	135.	76.5051	.10141	205.51	.00336	135.	76.5696	.10163	206.68	.00336
	140.	75.7379	.09928	191.24	.00332	140.	75.8057	.09951	192.35	.00333
	145.	74.9642	.09718	178.15	.00328	145.	75.0357	.09742	179.19	.00329
	150.	74.1836	.09510	166.14	.00324	150.	74.2589	.09535	167.13	.00325
	155.	73.3953	.09302	155.13	.00320	155.	73.4748	.09329	156.07	.00321
	160.	72.5986	.09095	145.03	.00316	160.	72.6827	.09122	145.93	.00317
	165.	71.7928	.08888	135.76	.00311	165.	71.8818	.08916	136.62	.00313
	170.	70.9770	.08680	127.24	.00307	170.	71.0713	.08710	128.08	.00308
	175.	70.1502	.08471	119.41	.00302	175.	70.2502	.08503	120.21	.00303
	180.	69.3111	.08262	112.18	.00297	180.	69.4174	.08294	112.96	.00298
	185.	68.4585	.08051	105.51	.00291	185.	68.5718	.08085	106.27	.00293
	190.	67.5909	.07839	99.34	.00286	190.	67.7118	.07875	100.09	.00287
	195.	66.7066	.07626	93.62	.00280	195.	66.8360	.07663	94.35	.00281
	200.	65.8035	.07411	88.29	.00273	200.	65.9424	.07450	89.01	.00275
	205.	64.8794	.07194	83.33	.00267	205.	65.0289	.07235	84.04	.00269
	210.	63.9318	.06976	78.69	.00260	210.	64.0933	.07019	79.39	.00262
	215.	62.9575	.06756	74.33	.00253	215.	63.1327	.06801	75.04	.00255
	220.	61.9533	.06534	70.24	.00245	220.	62.1441	.06582	70.95	.00248
	225.	60.9149	.06310	66.37	.00237	225.	61.1238	.06360	67.09	.00240
	230.	59.8377	.06084	62.70	.00228	230.	60.0675	.06138	63.44	.00232
	235.	58.7159	.05855	59.22	.00220	235.	58.9704	.05913	59.97	.00223
	240.	57.5426	.05625	55.89	.00210	240.	57.8265	.05686	56.66	.00214
	245.	56.3094	.05392	52.70	.00201	245.	56.6286	.05458	53.50	.00205
	250.	55.0058	.05158	49.61	.00191	250.	55.3682	.05229	50.45	.00195
	255.	53.6181	.04922	46.62	.00180	255.	54.0341	.04999	47.51	.00185
	260.	52.1282	.04686	43.70	.00169	260.	52.6126	.04769	44.64	.00175
	265.	50.5113	.04455	40.81	.00157	265.	51.0851	.04544	41.84	.00164
	270.	48.7310	.04236	37.94	.00145	270.	49.4261	.04331	39.07	.00153
	275.	46.7313	.04050	35.02	.00133	275.	47.5994	.04146	36.31	.00143
	280.	44.4195	.03879	32.01	.00120	280.	45.5501	.03973	33.51	.00132
	285.	41.6287	.03623	28.79	.00102	285.	43.1929	.03731	30.63	.00117
	290.	38.0518	.03370	25.22	.00083	290.	40.3929	.03495	27.60	.00101
	295.	33.3314	.03094	21.29	.00069	295.	36.9726	.03260	24.38	.00087
	300.	28.1152	.02754	17.82	.00070	300.	32.9116	.03013	21.15	.00079
	310.	20.9261	.02131	14.30	.00108	310.	25.2151	.02462	16.46	.00094
	320.	17.3850	.01822	13.12	.00160	320.	20.4363	.02055	14.40	.00132
	330.	15.3058	.01670	12.63	.00211	330.	17.6349	.01834	13.51	.00177
	340.	13.8805	.01588	12.41	.00258	340.	15.7898	.01711	13.09	.00222
	350.	12.8108	.01542	12.33	.00303	350.	14.4500	.01639	12.88	.00265
	360.	11.9615	.01516	12.33	.00347	360.	13.4116	.01597	12.79	.00306
	370.	11.2614	.01503	12.37	.00389	370.	12.5708	.01572	12.77	.00346
	380.	10.6684	.01499	12.44	.00431	380.	11.8683	.01559	12.80	.00385
	390.	10.1560	.01501	12.54	.00472	390.	11.2677	.01554	12.87	.00424
	400.	9.7063	.01507	12.66	.00514	400.	10.7450	.01555	12.95	.00463
	410.	9.3066	.01516	12.78	.00555	410.	10.2837	.01560	13.06	.00502
	420.	8.9478	.01527	12.92	.00596	420.	9.8721	.01568	13.17	.00540
	430.	8.6230	.01541	13.07	.00637	430.	9.5013	.01579	13.30	.00578
	440.	8.3269	.01556	13.22	.00679	440.	9.1646	.01591	13.44	.00617
	450.	8.0553	.01572	13.37	.00720	450.	8.8569	.01605	13.58	.00655
	460.	7.8049	.01589	13.53	.00762	460.	8.5742	.01620	13.73	.00694
	470.	7.5729	.01606	13.69	.00804	470.	8.3129	.01636	13.88	.00733
	480.	7.3572	.01624	13.86	.00846	480.	8.0706	.01653	14.04	.00772
	490.	7.1558	.01643	14.02	.00888	490.	7.8449	.01670	14.19	.00811
	500.	6.9673	.01662	14.19	.00931	500.	7.6340	.01688	14.35	.00851
	510.	6.7902	.01682	14.36	.00974	510.	7.4363	.01707	14.52	.00891
	520.	6.6234	.01701	14.53	.01017	520.	7.2504	.01726	14.68	.00931
	530.	6.4660	.01721	14.70	.01061	530.	7.0752	.01745	14.84	.00971
	540.	6.3171	.01741	14.87	.01104	540.	6.9097	.01764	15.01	.01012

* Two Phase Boundary

Table 7. Transport Properties of Oxygen, Isobars, Engr. Units.

1300. psia Isobar					1400. psia Isobar				
Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h	Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h
* 99.688	81.9000	.11894	344.48	.00367	* 99.829	81.9269	.11904	345.86	.00367
100.	81.8536	.11876	343.09	.00366	100.	81.9015	.11894	345.09	.00367
105.	81.1116	.11594	320.85	.00361	105.	81.1609	.11612	322.68	.00361
110.	80.3709	.11331	299.14	.00356	110.	80.4219	.11349	300.82	.00357
115.	79.6296	.11083	278.37	.00352	115.	79.6825	.11102	279.92	.00352
120.	78.8861	.10847	258.77	.00348	120.	78.9414	.10867	260.21	.00349
125.	78.1395	.10620	240.48	.00344	125.	78.1973	.10640	241.81	.00345
130.	77.3889	.10400	223.51	.00341	130.	77.4495	.10421	224.76	.00341
135.	76.6336	.10185	207.85	.00337	135.	76.6973	.10208	209.03	.00338
140.	75.8730	.09975	193.46	.00333	140.	75.9400	.09998	194.56	.00334
145.	75.1066	.09766	180.24	.00330	145.	75.1770	.09790	181.28	.00331
150.	74.3336	.09560	168.12	.00326	150.	74.4078	.09585	169.11	.00327
155.	73.5536	.09355	157.01	.00322	155.	73.6319	.09381	157.96	.00323
160.	72.7660	.09150	146.83	.00318	160.	72.8485	.09177	147.73	.00319
165.	71.9699	.08945	137.49	.00314	165.	72.0571	.08973	138.35	.00315
170.	71.1645	.08739	128.91	.00309	170.	71.2569	.08769	129.73	.00310
175.	70.3491	.08533	121.01	.00305	175.	70.4470	.08564	121.81	.00306
180.	69.5225	.08326	113.74	.00300	180.	69.6264	.08358	114.52	.00301
185.	68.6836	.08119	107.03	.00294	185.	68.7940	.08152	107.78	.00296
190.	67.8311	.07910	100.82	.00289	190.	67.9487	.07944	101.56	.00290
195.	66.9634	.07699	95.07	.00283	195.	67.0890	.07736	95.79	.00285
200.	66.0789	.07488	89.72	.00277	200.	66.2133	.07526	90.43	.00279
205.	65.1757	.07275	84.75	.00271	205.	65.3199	.07315	85.45	.00273
210.	64.2516	.07061	80.10	.00264	210.	64.4067	.07103	80.79	.00266
215.	63.3040	.06845	75.74	.00257	215.	63.4716	.06889	76.43	.00260
220.	62.3302	.06628	71.65	.00250	220.	62.5118	.06675	72.34	.00253
225.	61.3268	.06410	67.80	.00243	225.	61.5245	.06459	68.49	.00245
230.	60.2902	.06190	64.15	.00235	230.	60.5063	.06242	64.86	.00238
235.	59.2160	.05969	60.70	.00226	235.	59.4534	.06023	61.42	.00230
240.	58.0991	.05746	57.41	.00218	240.	58.3614	.05804	58.15	.00221
245.	56.9333	.05522	54.27	.00209	245.	57.2250	.05584	55.03	.00213
250.	55.7115	.05297	51.26	.00200	250.	56.0381	.05363	52.04	.00204
255.	54.4248	.05072	48.36	.00190	255.	54.7935	.05143	49.17	.00195
260.	53.0622	.04848	45.54	.00181	260.	53.4824	.04924	46.40	.00186
265.	51.6096	.04629	42.81	.00171	265.	52.0938	.04710	43.72	.00177
270.	50.0486	.04421	40.12	.00161	270.	50.6139	.04505	41.10	.00167
275.	48.3542	.04237	37.47	.00151	275.	49.0251	.04323	38.54	.00158
280.	46.4916	.04063	34.83	.00141	280.	47.3039	.04148	36.01	.00149
285.	44.4114	.03831	32.16	.00128	285.	45.4192	.03925	33.49	.00138
290.	42.0430	.03606	29.44	.00115	290.	43.3301	.03709	30.96	.00126
295.	39.2971	.03388	26.63	.00103	295.	40.9870	.03501	28.42	.00115
300.	36.1123	.03173	23.79	.00093	300.	38.3476	.03300	25.86	.00106
310.	29.1534	.02723	18.84	.00093	310.	32.3731	.02907	21.09	.00098
320.	23.6803	.02300	15.96	.00117	320.	26.8207	.02521	17.71	.00111
330.	20.1511	.02018	14.57	.00154	330.	22.7589	.02209	15.80	.00139
340.	17.8303	.01850	13.87	.00194	340.	19.9703	.02000	14.78	.00173
350.	16.1803	.01749	13.50	.00234	350.	17.9885	.01869	14.22	.00209
360.	14.9271	.01687	13.31	.00273	360.	16.5009	.01784	13.90	.00246
370.	13.9287	.01648	13.22	.00311	370.	15.3304	.01730	13.72	.00282
380.	13.1052	.01625	13.20	.00348	380.	14.3756	.01696	13.63	.00317
390.	12.4082	.01612	13.22	.00385	390.	13.5750	.01674	13.61	.00352
400.	11.8067	.01607	13.27	.00421	400.	12.8891	.01662	13.62	.00386
410.	11.2794	.01607	13.35	.00457	410.	12.2918	.01657	13.67	.00420
420.	10.8115	.01611	13.45	.00493	420.	11.7644	.01657	13.74	.00454
430.	10.3920	.01619	13.55	.00529	430.	11.2937	.01661	13.82	.00488
440.	10.0126	.01628	13.67	.00565	440.	10.8697	.01667	13.92	.00522
450.	9.6672	.01640	13.80	.00601	450.	10.4849	.01676	14.04	.00556
460.	9.3506	.01653	13.94	.00638	460.	10.1333	.01687	14.16	.00590
470.	9.0590	.01667	14.08	.00674	470.	9.8102	.01700	14.29	.00624
480.	8.7891	.01683	14.22	.00710	480.	9.5118	.01713	14.42	.00658
490.	8.5382	.01699	14.37	.00747	490.	9.2351	.01728	14.56	.00693
500.	8.3043	.01715	14.52	.00784	500.	8.9775	.01743	14.70	.00727
510.	8.0853	.01733	14.68	.00821	510.	8.7367	.01759	14.85	.00762
520.	7.8798	.01750	14.83	.00858	520.	8.5111	.01776	15.00	.00797
530.	7.6864	.01769	14.99	.00896	530.	8.2990	.01793	15.15	.00832
540.	7.5039	.01787	15.15	.00934	540.	8.0992	.01811	15.30	.00867

* Two Phase Boundary

Table 7. Transport Properties of Oxygen. Isobars, Engr. Units.

	1500. psia Isobar					1600. psia Isobar				
	Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h	Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h
*	99.969	81.9538	.11913	347.24	.00367					
	100.	81.9493	.11912	347.10	.00367	* 100.109	81.9806	.11923	348.62	.00367
	105.	81.2099	.11630	324.52	.00362	105.	81.2588	.11648	326.36	.00362
	110.	80.4726	.11368	302.51	.00357	110.	80.5231	.11387	304.19	.00358
	115.	79.7353	.11121	281.47	.00353	115.	79.7877	.11140	283.03	.00354
	120.	78.9964	.10886	261.65	.00349	120.	79.0511	.10906	263.09	.00350
	125.	78.2549	.10661	243.15	.00346	125.	78.3121	.10681	244.49	.00346
	130.	77.5098	.10443	226.01	.00342	130.	77.5698	.10464	227.26	.00343
	135.	76.7606	.10230	210.20	.00339	135.	76.8235	.10252	211.38	.00339
	140.	76.0065	.10021	195.67	.00335	140.	76.0725	.10043	196.77	.00336
	145.	75.2469	.09814	182.33	.00331	145.	75.3164	.09838	183.37	.00332
	150.	74.4815	.09610	170.10	.00328	150.	74.5546	.09635	171.09	.00329
	155.	73.7095	.09407	158.90	.00324	155.	73.7865	.09432	159.84	.00325
	160.	72.9304	.09204	148.63	.00320	160.	73.0116	.09230	149.52	.00321
	165.	72.1436	.09001	139.21	.00316	165.	72.2293	.09029	140.07	.00317
	170.	71.3483	.08798	130.56	.00312	170.	71.4389	.08827	131.38	.00313
	175.	70.5438	.08594	122.61	.00307	175.	70.6396	.08624	123.40	.00308
	180.	69.7290	.08390	115.29	.00302	180.	69.8306	.08421	116.06	.00304
	185.	68.9031	.08185	108.53	.00297	185.	69.0108	.08217	109.28	.00299
	190.	68.0647	.07979	102.29	.00292	190.	68.1793	.08013	103.02	.00294
	195.	67.2127	.07772	96.51	.00287	195.	67.3347	.07807	97.22	.00288
	200.	66.3455	.07563	91.14	.00281	200.	66.4757	.07600	91.83	.00282
	205.	65.4616	.07354	86.14	.00275	205.	65.6009	.07393	86.83	.00277
	210.	64.5590	.07144	81.48	.00268	210.	64.7084	.07184	82.16	.00270
	215.	63.6356	.06932	77.12	.00262	215.	63.7964	.06975	77.79	.00264
	220.	62.6892	.06720	73.03	.00255	220.	62.8627	.06765	73.70	.00257
	225.	61.7171	.06506	69.18	.00248	225.	61.9049	.06553	69.86	.00250
	230.	60.7162	.06292	65.55	.00240	230.	60.9204	.06341	66.23	.00243
	235.	59.6833	.06077	62.12	.00233	235.	59.9061	.06129	62.81	.00236
	240.	58.6143	.05860	58.86	.00225	240.	58.8586	.05916	59.56	.00228
	245.	57.5048	.05644	55.76	.00217	245.	57.7740	.05702	56.48	.00220
	250.	56.3497	.05427	52.80	.00208	250.	56.6480	.05489	53.53	.00212
	255.	55.1430	.05211	49.96	.00200	255.	55.4754	.05276	50.72	.00204
	260.	53.8773	.04996	47.23	.00191	260.	54.2503	.05066	48.02	.00195
	265.	52.5442	.04786	44.59	.00182	265.	52.9660	.04860	45.42	.00187
	270.	51.1331	.04586	42.03	.00173	270.	51.6141	.04662	42.90	.00179
	275.	49.6310	.04405	39.53	.00165	275.	50.1850	.04483	40.46	.00171
	280.	48.0216	.04231	37.08	.00156	280.	48.6668	.04309	38.08	.00163
	285.	46.2842	.04014	34.67	.00146	285.	47.0452	.04099	35.76	.00153
	290.	44.3932	.03805	32.29	.00136	290.	45.3035	.03896	33.47	.00144
	295.	42.3189	.03604	29.92	.00126	295.	43.4229	.03701	31.23	.00135
	300.	40.0347	.03412	27.56	.00117	300.	41.3863	.03514	29.02	.00127
	310.	34.8761	.03047	23.07	.00106	310.	36.8457	.03166	24.78	.00115
	320.	29.6303	.02701	19.48	.00111	320.	32.0332	.02846	21.17	.00115
	330.	25.3207	.02390	17.16	.00131	330.	27.7163	.02551	18.57	.00128
	340.	22.1526	.02156	15.80	.00159	340.	24.3046	.02307	16.91	.00150
	350.	19.8495	.01996	15.01	.00191	350.	21.7272	.02126	15.88	.00177
	360.	18.1201	.01889	14.54	.00224	360.	19.7659	.01999	15.25	.00208
	370.	16.7684	.01819	14.26	.00258	370.	18.2318	.01912	14.86	.00239
	380.	15.6746	.01772	14.10	.00291	380.	16.9950	.01852	14.61	.00270
	390.	14.7641	.01741	14.02	.00324	390.	15.9709	.01811	14.47	.00301
	400.	13.9894	.01721	13.99	.00357	400.	15.1039	.01783	14.39	.00332
	410.	13.3184	.01710	14.01	.00389	410.	14.3565	.01766	14.36	.00362
	420.	12.7289	.01705	14.05	.00421	420.	13.7026	.01756	14.37	.00393
	430.	12.2048	.01705	14.11	.00453	430.	13.1235	.01751	14.41	.00423
	440.	11.7345	.01708	14.19	.00485	440.	12.6054	.01751	14.47	.00453
	450.	11.3089	.01714	14.28	.00517	450.	12.1379	.01754	14.54	.00484
	460.	10.9211	.01723	14.39	.00549	460.	11.7130	.01760	14.63	.00514
	470.	10.5656	.01733	14.50	.00581	470.	11.3243	.01768	14.73	.00544
	480.	10.2381	.01745	14.63	.00613	480.	10.9668	.01778	14.84	.00575
	490.	9.9348	.01758	14.75	.00646	490.	10.6365	.01789	14.96	.00605
	500.	9.6529	.01772	14.89	.00678	500.	10.3299	.01801	15.08	.00636
	510.	9.3899	.01787	15.03	.00711	510.	10.0443	.01815	15.21	.00667
	520.	9.1438	.01802	15.17	.00744	520.	9.7774	.01829	15.34	.00698
	530.	8.9128	.01818	15.31	.00777	530.	9.5271	.01844	15.48	.00729
	540.	8.6953	.01835	15.46	.00810	540.	9.2918	.01859	15.62	.00760

* Two Phase Boundary

Table 7. Transport Properties of Oxygen, Isobars, Engr. Units.

1700. psia Isobar					1800. psia Isobar				
Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h	Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h
* 100.250	82.0074	.11933	349.99	.00368	* 100.390	82.0341	.11942	351.36	.00368
105.	81.3074	.11666	328.20	.00363	105.	81.3559	.11684	330.04	.00363
110.	80.5734	.11405	305.88	.00358	110.	80.6235	.11423	307.57	.00359
115.	79.8400	.11159	284.58	.00354	115.	79.8920	.11178	286.14	.00355
120.	79.1056	.10926	264.53	.00350	120.	79.1598	.10945	265.97	.00351
125.	78.3690	.10702	245.83	.00347	125.	78.4257	.10722	247.18	.00348
130.	77.6294	.10485	228.52	.00343	130.	77.6887	.10506	229.77	.00344
135.	76.8860	.10274	212.55	.00340	135.	76.9481	.10295	213.72	.00341
140.	76.1382	.10066	197.87	.00337	140.	76.2034	.10089	198.98	.00337
145.	75.3854	.09862	184.41	.00333	145.	75.4539	.09885	185.45	.00334
150.	74.6272	.09659	172.08	.00330	150.	74.6992	.09684	173.06	.00330
155.	73.8629	.09458	160.77	.00326	155.	73.9388	.09483	161.71	.00327
160.	73.0922	.09257	150.42	.00322	160.	73.1720	.09283	151.31	.00323
165.	72.3143	.09056	140.92	.00318	165.	72.3985	.09084	141.78	.00319
170.	71.5286	.08855	132.21	.00314	170.	71.6175	.08884	133.03	.00315
175.	70.7345	.08654	124.20	.00309	175.	70.8284	.08684	124.98	.00311
180.	69.9310	.08452	116.82	.00305	180.	70.0303	.08483	117.58	.00306
185.	69.1173	.08250	110.02	.00300	185.	69.2225	.08282	110.76	.00301
190.	68.2923	.08046	103.74	.00295	190.	68.4039	.08080	104.46	.00296
195.	67.4550	.07842	97.92	.00290	195.	67.5736	.07877	98.62	.00291
200.	66.6040	.07637	92.53	.00284	200.	66.7303	.07673	93.21	.00286
205.	65.7379	.07431	87.51	.00278	205.	65.8726	.07469	88.18	.00280
210.	64.8551	.07224	82.83	.00272	210.	64.9992	.07264	83.50	.00274
215.	63.9539	.07017	78.46	.00266	215.	64.1085	.07058	79.12	.00268
220.	63.0324	.06808	74.37	.00260	220.	63.1985	.06852	75.03	.00262
225.	62.0882	.06599	70.52	.00253	225.	62.2674	.06645	71.18	.00255
230.	61.1192	.06390	66.90	.00246	230.	61.3129	.06437	67.56	.00248
235.	60.1224	.06180	63.49	.00239	235.	60.3327	.06230	64.15	.00241
240.	59.0950	.05969	60.25	.00231	240.	59.3240	.06022	60.92	.00234
245.	58.0335	.05759	57.18	.00224	245.	58.2840	.05814	57.86	.00227
250.	56.9341	.05549	54.25	.00216	250.	57.2093	.05607	54.95	.00219
255.	55.7927	.05340	51.46	.00208	255.	56.0963	.05401	52.18	.00212
260.	54.6041	.05133	48.78	.00200	260.	54.9409	.05198	49.52	.00204
265.	53.3630	.04931	46.21	.00192	265.	53.7385	.04999	46.98	.00196
270.	52.0629	.04736	43.74	.00184	270.	52.4841	.04807	44.54	.00189
275.	50.6962	.04558	41.34	.00176	275.	51.1717	.04630	42.18	.00181
280.	49.2543	.04385	39.02	.00169	280.	49.7948	.04458	39.90	.00174
285.	47.7270	.04180	36.76	.00160	285.	48.3460	.04258	37.70	.00166
290.	46.1028	.03983	34.56	.00151	290.	46.8173	.04065	35.56	.00158
295.	44.3694	.03793	32.40	.00143	295.	45.2003	.03879	33.47	.00150
300.	42.5156	.03610	30.30	.00135	300.	43.4876	.03701	31.45	.00143
310.	38.4395	.03272	26.28	.00123	310.	39.7679	.03370	27.60	.00131
320.	34.0543	.02967	22.72	.00120	320.	35.7569	.03074	24.14	.00126
330.	29.8796	.02690	19.96	.00128	330.	31.7947	.02810	21.31	.00130
340.	26.3604	.02448	18.06	.00145	340.	28.2751	.02575	19.22	.00143
350.	23.5799	.02255	16.81	.00168	350.	25.3690	.02377	17.78	.00162
360.	21.4146	.02111	16.01	.00195	360.	23.0407	.02222	16.82	.00186
370.	19.7067	.02008	15.49	.00223	370.	21.1769	.02106	16.17	.00211
380.	18.3283	.01935	15.16	.00252	380.	19.6640	.02021	15.74	.00238
390.	17.1894	.01884	14.94	.00281	390.	18.4127	.01959	15.45	.00265
400.	16.2284	.01848	14.81	.00310	400.	17.3580	.01915	15.26	.00293
410.	15.4029	.01824	14.75	.00339	410.	16.4540	.01884	15.15	.00320
420.	14.6832	.01808	14.72	.00368	420.	15.6677	.01862	15.08	.00348
430.	14.0477	.01799	14.73	.00397	430.	14.9752	.01849	15.06	.00375
440.	13.4808	.01795	14.76	.00426	440.	14.3587	.01840	15.07	.00402
450.	12.9705	.01795	14.82	.00455	450.	13.8050	.01837	15.10	.00430
460.	12.5077	.01798	14.89	.00484	460.	13.3039	.01837	15.15	.00457
470.	12.0852	.01803	14.97	.00512	470.	12.8472	.01840	15.22	.00484
480.	11.6973	.01811	15.07	.00541	480.	12.4285	.01846	15.30	.00512
490.	11.3395	.01821	15.17	.00570	490.	12.0428	.01853	15.39	.00539
500.	11.0078	.01831	15.28	.00599	500.	11.6859	.01862	15.49	.00567
510.	10.6993	.01843	15.40	.00629	510.	11.3542	.01872	15.60	.00595
520.	10.4112	.01856	15.53	.00658	520.	11.0448	.01884	15.72	.00623
530.	10.1414	.01870	15.65	.00687	530.	10.7554	.01896	15.83	.00651
540.	9.8881	.01884	15.79	.00717	540.	10.4838	.01909	15.96	.00679

* Two Phase Boundary

Table 7. Transport Properties of Oxygen, Isobars, Engr. Units.

1900. psia Isobar					2000. psia Isobar				
Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h	Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h
* 100.529	82.0607	.11952	352.72	.00368	* 100.669	82.0872	.11962	354.08	.00368
105.	81.4042	.11702	331.89	.00364	105.	81.4524	.11720	333.74	.00364
110.	80.6734	.11442	309.26	.00359	110.	80.7231	.11460	310.96	.00360
115.	79.9438	.11197	287.70	.00355	115.	79.9953	.11216	289.26	.00356
120.	79.2137	.10965	267.42	.00352	120.	79.2674	.10984	268.86	.00352
125.	78.4820	.10742	248.52	.00348	125.	78.5360	.10762	249.86	.00349
130.	77.7476	.10527	231.02	.00345	130.	77.8063	.10548	232.27	.00345
135.	77.0099	.10317	214.90	.00341	135.	77.0713	.10339	216.07	.00342
140.	76.2682	.10111	200.08	.00338	140.	76.3326	.10134	201.18	.00339
145.	75.5220	.09909	186.49	.00335	145.	75.5896	.09932	187.53	.00336
150.	74.7708	.09708	174.05	.00331	150.	74.8418	.09732	175.03	.00332
155.	74.0140	.09508	162.65	.00328	155.	74.0887	.09534	163.58	.00329
160.	73.2513	.09310	152.20	.00324	160.	73.3299	.09336	153.09	.00325
165.	72.4820	.09111	142.63	.00320	165.	72.5647	.09138	143.48	.00321
170.	71.7055	.08912	133.84	.00316	170.	71.7928	.08941	134.66	.00317
175.	70.9213	.08713	125.77	.00312	175.	71.0134	.08743	126.55	.00313
180.	70.1286	.08514	118.34	.00307	180.	70.2258	.08544	119.10	.00309
185.	69.3265	.08314	111.50	.00303	185.	69.4293	.08345	112.23	.00304
190.	68.5142	.08113	105.17	.00298	190.	68.6231	.08146	105.88	.00299
195.	67.6906	.07911	99.32	.00293	195.	67.8062	.07946	100.02	.00294
200.	66.8548	.07709	93.90	.00288	200.	66.9775	.07745	94.58	.00289
205.	66.0053	.07506	88.86	.00282	205.	66.1359	.07543	89.52	.00284
210.	65.1409	.07303	84.16	.00276	210.	65.2802	.07341	84.82	.00278
215.	64.2601	.07099	79.78	.00270	215.	64.4090	.07139	80.43	.00272
220.	63.3612	.06894	75.68	.00264	220.	63.5208	.06936	76.32	.00266
225.	62.4425	.06689	71.83	.00258	225.	62.6138	.06733	72.48	.00260
230.	61.5019	.06484	68.22	.00251	230.	61.6864	.06530	68.86	.00253
235.	60.5373	.06279	64.81	.00244	235.	60.7366	.06327	65.45	.00247
240.	59.5463	.06073	61.59	.00237	240.	59.7622	.06124	62.24	.00240
245.	58.5263	.05868	58.53	.00230	245.	58.7610	.05921	59.19	.00233
250.	57.4745	.05664	55.64	.00223	250.	57.7304	.05719	56.30	.00226
255.	56.3876	.05461	52.88	.00215	255.	56.6678	.05519	53.56	.00219
260.	55.2624	.05261	50.24	.00208	260.	55.5703	.05322	50.94	.00212
265.	54.0950	.05064	47.72	.00200	265.	54.4346	.05128	48.44	.00204
270.	52.8813	.04875	45.30	.00193	270.	53.2575	.04941	46.05	.00197
275.	51.6166	.04700	42.98	.00186	275.	52.0353	.04767	43.75	.00191
280.	50.2960	.04529	40.74	.00179	280.	50.7641	.04598	41.54	.00184
285.	48.9140	.04333	38.58	.00172	285.	49.4397	.04405	39.42	.00177
290.	47.4648	.04144	36.49	.00164	290.	48.0581	.04220	37.37	.00170
295.	45.9427	.03962	34.47	.00157	295.	46.6151	.04041	35.39	.00163
300.	44.3427	.03787	32.51	.00150	300.	45.1074	.03870	33.48	.00156
310.	40.9037	.03462	28.79	.00139	310.	41.8951	.03549	29.88	.00145
320.	37.2070	.03172	25.43	.00132	320.	38.4600	.03264	26.60	.00138
330.	33.4765	.02916	22.58	.00134	330.	34.9531	.03012	23.77	.00138
340.	30.0281	.02688	20.37	.00143	340.	31.6170	.02790	21.48	.00145
350.	27.0657	.02491	18.77	.00159	350.	28.6529	.02596	19.76	.00157
360.	24.6204	.02330	17.65	.00179	360.	26.1349	.02432	18.50	.00175
370.	22.6260	.02203	16.88	.00202	370.	24.0387	.02299	17.61	.00195
380.	20.9911	.02108	16.35	.00226	380.	22.2983	.02194	16.98	.00217
390.	19.6331	.02037	15.98	.00252	390.	20.8427	.02115	16.54	.00241
400.	18.4873	.01984	15.73	.00278	400.	19.6106	.02054	16.22	.00265
410.	17.5058	.01946	15.57	.00304	410.	18.5541	.02009	16.01	.00290
420.	16.6532	.01919	15.47	.00330	420.	17.6364	.01976	15.86	.00314
430.	15.9035	.01900	15.41	.00356	430.	16.8303	.01952	15.77	.00339
440.	15.2374	.01887	15.39	.00382	440.	16.1147	.01936	15.72	.00364
450.	14.6401	.01880	15.40	.00408	450.	15.4739	.01925	15.71	.00389
460.	14.1003	.01877	15.43	.00434	460.	14.8955	.01919	15.72	.00413
470.	13.6091	.01878	15.48	.00460	470.	14.3699	.01916	15.75	.00438
480.	13.1595	.01881	15.55	.00486	480.	13.8893	.01917	15.80	.00463
490.	12.7458	.01886	15.62	.00512	490.	13.4475	.01920	15.86	.00488
500.	12.3633	.01894	15.71	.00539	500.	13.0395	.01926	15.93	.00513
510.	12.0083	.01902	15.81	.00565	510.	12.6611	.01933	16.02	.00539
520.	11.6776	.01912	15.91	.00592	520.	12.3089	.01941	16.11	.00564
530.	11.3684	.01923	16.02	.00618	530.	11.9799	.01951	16.21	.00589
540.	11.0784	.01935	16.14	.00645	540.	11.6716	.01961	16.32	.00615

* Two Phase Boundary

Table 7. Transport Properties of Oxygen, Isobars, Engr. Units.

	2200. psia Isobar					2400. psia Isobar				
	Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h	Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h
*	100.948	82.1400	.11981	356.77	.00369	* 101.226	82.1925	.12000	359.45	.00369
	105.	81.5481	.11756	337.46	.00365	105.	81.6431	.11791	341.20	.00366
	110.	80.8219	.11497	314.36	.00361	110.	80.9198	.11533	317.78	.00362
	115.	80.0978	.11253	292.39	.00357	115.	80.1993	.11291	295.53	.00358
	120.	79.3740	.11023	271.76	.00353	120.	79.4796	.11061	274.66	.00354
	125.	78.6493	.10802	252.55	.00350	125.	78.7594	.10842	255.24	.00351
	130.	77.9226	.10589	234.78	.00347	130.	78.0376	.10630	237.29	.00348
	135.	77.1931	.10382	218.42	.00344	135.	77.3135	.10424	220.76	.00345
	140.	76.4602	.10178	203.39	.00340	140.	76.5863	.10223	205.59	.00342
	145.	75.7235	.09978	189.61	.00337	145.	75.8557	.10024	191.68	.00339
	150.	74.9824	.09780	176.99	.00334	150.	75.1210	.09828	178.95	.00336
	155.	74.2364	.09584	165.44	.00330	155.	74.3820	.09633	167.30	.00332
	160.	73.4852	.09388	154.86	.00327	160.	73.6381	.09439	156.63	.00329
	165.	72.7282	.09192	145.17	.00323	165.	72.8890	.09245	146.86	.00325
	170.	71.9649	.08996	136.28	.00319	170.	72.1340	.09052	137.89	.00321
	175.	71.1948	.08801	128.11	.00315	175.	71.3729	.08858	129.66	.00318
	180.	70.4173	.08605	120.60	.00311	180.	70.6049	.08664	122.10	.00313
	185.	69.6316	.08408	113.68	.00307	185.	69.8296	.08469	115.13	.00309
	190.	68.8371	.08211	107.30	.00302	190.	69.0461	.08275	108.70	.00305
	195.	68.0328	.08013	101.39	.00297	195.	68.2538	.08079	102.76	.00300
	200.	67.2179	.07815	95.92	.00292	200.	67.4519	.07884	97.25	.00295
	205.	66.3914	.07616	90.84	.00287	205.	66.6396	.07688	92.14	.00290
	210.	65.5522	.07417	86.12	.00282	210.	65.8157	.07491	87.40	.00285
	215.	64.6991	.07218	81.71	.00276	215.	64.9795	.07295	82.97	.00280
	220.	63.8308	.07018	77.59	.00270	220.	64.1297	.07099	78.84	.00274
	225.	62.9460	.06819	73.74	.00264	225.	63.2651	.06902	74.97	.00268
	230.	62.0431	.06619	70.12	.00258	230.	62.3846	.06706	71.35	.00262
	235.	61.1206	.06420	66.71	.00252	235.	61.4868	.06511	67.94	.00256
	240.	60.1767	.06221	63.50	.00245	240.	60.5704	.06316	64.74	.00250
	245.	59.2097	.06023	60.47	.00239	245.	59.6338	.06122	61.71	.00244
	250.	58.2176	.05827	57.60	.00232	250.	58.6756	.05929	58.85	.00238
	255.	57.1983	.05631	54.87	.00225	255.	57.6943	.05738	56.14	.00231
	260.	56.1499	.05439	52.28	.00219	260.	56.6881	.05550	53.56	.00225
	265.	55.0700	.05250	49.81	.00212	265.	55.6557	.05366	51.12	.00219
	270.	53.9563	.05068	47.46	.00205	270.	54.5952	.05187	48.79	.00213
	275.	52.8065	.04896	45.20	.00199	275.	53.5052	.05018	46.57	.00207
	280.	51.6181	.04729	43.05	.00193	280.	52.3841	.04853	44.45	.00201
	285.	50.3889	.04543	40.98	.00186	285.	51.2306	.04673	42.42	.00195
	290.	49.1164	.04364	38.99	.00180	290.	50.0435	.04499	40.48	.00189
	295.	47.7989	.04191	37.09	.00174	295.	48.8217	.04331	38.62	.00183
	300.	46.4347	.04025	35.26	.00168	300.	47.5649	.04169	36.85	.00178
	310.	43.5667	.03713	31.82	.00157	310.	44.9476	.03864	33.52	.00168
	320.	40.5343	.03433	28.68	.00150	320.	42.2074	.03589	30.50	.00161
	330.	37.4139	.03187	25.91	.00147	330.	39.3892	.03345	27.79	.00157
	340.	34.3443	.02971	23.56	.00150	340.	36.5754	.03131	25.44	.00157
	350.	31.4797	.02782	21.67	.00158	350.	33.8715	.02945	23.47	.00162
	360.	28.9239	.02618	20.21	.00171	360.	31.3709	.02782	21.87	.00171
	370.	26.7086	.02478	19.11	.00187	370.	29.1275	.02640	20.62	.00183
	380.	24.8145	.02363	18.30	.00205	380.	27.1531	.02520	19.65	.00198
	390.	23.1995	.02269	17.70	.00225	390.	25.4317	.02418	18.90	.00215
	400.	21.8164	.02196	17.26	.00246	400.	23.9341	.02335	18.34	.00233
	410.	20.6228	.02138	16.93	.00267	410.	22.6276	.02267	17.91	.00252
	420.	19.5830	.02094	16.70	.00290	420.	21.4818	.02213	17.58	.00272
	430.	18.6687	.02060	16.53	.00312	430.	20.4700	.02170	17.34	.00292
	440.	17.8573	.02035	16.42	.00334	440.	19.5701	.02137	17.16	.00312
	450.	17.1314	.02017	16.35	.00357	450.	18.7642	.02111	17.04	.00333
	460.	16.4771	.02004	16.32	.00380	460.	18.0375	.02092	16.95	.00353
	470.	15.8833	.01996	16.31	.00402	470.	17.3781	.02078	16.90	.00374
	480.	15.3412	.01992	16.32	.00425	480.	16.7765	.02069	16.88	.00395
	490.	14.8437	.01990	16.36	.00448	490.	16.2248	.02063	16.88	.00416
	500.	14.3849	.01992	16.40	.00471	500.	15.7164	.02060	16.90	.00437
	510.	13.9601	.01995	16.46	.00494	510.	15.2460	.02059	16.93	.00458
	520.	13.5651	.02000	16.53	.00517	520.	14.8090	.02061	16.98	.00480
	530.	13.1966	.02007	16.61	.00540	530.	14.4017	.02065	17.04	.00501
	540.	12.8518	.02015	16.70	.00564	540.	14.0208	.02070	17.11	.00522

* Two Phase Boundary

Table 7. Transport Properties of Oxygen, Isobars, Engr. Units.

2600. psia Isobar					2800. psia Isobar				
Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h	Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h
* 101.504	82.2447	.12019	362.11	.00370	* 101.731	82.2965	.12039	364.75	.00370
105.	81.7374	.11827	344.95	.00367	105.	81.8311	.11862	348.71	.00367
110.	81.0170	.11569	321.20	.00362	110.	81.1134	.11605	324.63	.00363
115.	80.2999	.11328	298.68	.00359	115.	80.3997	.11365	301.83	.00360
120.	79.5842	.11100	277.56	.00356	120.	79.6878	.11138	280.47	.00357
125.	78.8684	.10881	257.94	.00352	125.	78.9763	.10921	260.63	.00354
130.	78.1514	.10671	239.80	.00349	130.	78.2640	.10712	242.31	.00351
135.	77.4325	.10467	223.11	.00346	135.	77.5501	.10509	225.45	.00348
140.	76.7109	.10267	207.79	.00343	140.	76.8340	.10310	209.99	.00345
145.	75.9862	.10070	193.76	.00340	145.	76.1150	.10115	195.83	.00342
150.	75.2578	.09875	180.91	.00337	150.	75.3928	.09922	182.86	.00339
155.	74.5255	.09682	169.16	.00334	155.	74.6669	.09730	171.00	.00336
160.	73.7887	.09490	158.39	.00331	160.	73.9371	.09540	160.15	.00332
165.	73.0471	.09298	148.54	.00327	165.	73.2028	.09350	150.21	.00329
170.	72.3003	.09106	139.50	.00324	170.	72.4637	.09160	141.10	.00326
175.	71.5477	.08914	131.21	.00320	175.	71.7194	.08970	132.74	.00322
180.	70.7889	.08722	123.58	.00316	180.	70.9695	.08780	125.06	.00318
185.	70.0234	.08530	116.56	.00312	185.	70.2133	.08590	117.98	.00314
190.	69.2505	.08337	110.09	.00307	190.	69.4505	.08399	111.46	.00310
195.	68.4696	.08144	104.10	.00303	195.	68.6805	.08208	105.44	.00306
200.	67.6800	.07951	98.57	.00298	200.	67.9025	.08017	99.87	.00301
205.	66.8809	.07758	93.43	.00293	205.	67.1160	.07826	94.70	.00296
210.	66.0716	.07564	88.66	.00288	210.	66.3201	.07635	89.90	.00292
215.	65.2510	.07370	84.21	.00283	215.	65.5143	.07444	85.43	.00287
220.	64.4183	.07177	80.06	.00278	220.	64.6975	.07253	81.27	.00281
225.	63.5725	.06983	76.19	.00272	225.	63.8691	.07062	77.38	.00276
230.	62.7125	.06790	72.55	.00267	230.	63.0280	.06873	73.73	.00271
235.	61.8373	.06598	69.14	.00261	235.	62.1735	.06683	70.31	.00265
240.	60.9456	.06407	65.93	.00255	240.	61.3044	.06495	67.10	.00260
245.	60.0364	.06216	62.91	.00249	245.	60.4200	.06308	64.08	.00254
250.	59.1085	.06028	60.06	.00243	250.	59.5191	.06123	61.22	.00248
255.	58.1605	.05841	57.35	.00237	255.	58.6010	.05939	58.53	.00242
260.	57.1914	.05657	54.79	.00231	260.	57.6646	.05759	55.98	.00237
265.	56.1999	.05476	52.36	.00225	265.	56.7091	.05581	53.56	.00231
270.	55.1850	.05301	50.06	.00219	270.	55.7336	.05409	51.27	.00226
275.	54.1455	.05134	47.86	.00214	275.	54.7376	.05245	49.08	.00220
280.	53.0805	.04971	45.76	.00208	280.	53.7203	.05083	47.01	.00215
285.	51.9892	.04796	43.77	.00203	285.	52.6812	.04913	45.03	.00210
290.	50.8710	.04626	41.86	.00197	290.	51.6203	.04747	43.15	.00204
295.	49.7255	.04462	40.04	.00191	295.	50.5373	.04587	41.36	.00199
300.	48.5527	.04304	38.30	.00186	300.	49.4325	.04432	39.65	.00194
310.	46.1277	.04006	35.05	.00177	310.	47.1607	.04139	36.46	.00186
320.	43.6088	.03734	32.11	.00170	320.	44.8157	.03871	33.57	.00179
330.	41.0260	.03492	29.46	.00166	330.	42.4196	.03630	30.98	.00174
340.	38.4318	.03278	27.13	.00165	340.	40.0083	.03416	28.67	.00172
350.	35.8975	.03092	25.13	.00167	350.	37.6313	.03229	26.65	.00173
360.	33.4963	.02929	23.45	.00173	360.	35.3435	.03065	24.92	.00177
370.	31.2835	.02787	22.08	.00183	370.	33.1932	.02922	23.48	.00184
380.	29.2864	.02664	20.99	.00195	380.	31.2125	.02797	22.29	.00194
390.	27.5075	.02558	20.12	.00209	390.	29.4144	.02688	21.32	.00206
400.	25.9331	.02468	19.44	.00224	400.	27.7969	.02594	20.55	.00219
410.	24.5420	.02393	18.91	.00241	410.	26.3484	.02514	19.93	.00234
420.	23.3104	.02331	18.50	.00258	420.	25.0525	.02446	19.43	.00249
430.	22.2158	.02280	18.18	.00277	430.	23.8915	.02389	19.04	.00265
440.	21.2380	.02240	17.94	.00295	440.	22.8482	.02342	18.73	.00282
450.	20.3597	.02207	17.75	.00314	450.	21.9070	.02303	18.49	.00299
460.	19.5663	.02182	17.62	.00333	460.	21.0542	.02272	18.30	.00316
470.	18.8457	.02162	17.52	.00352	470.	20.2779	.02247	18.16	.00334
480.	18.1878	.02147	17.46	.00371	480.	19.5681	.02227	18.06	.00352
490.	17.5843	.02137	17.42	.00390	490.	18.9165	.02212	17.99	.00370
500.	17.0283	.02129	17.41	.00410	500.	18.3156	.02200	17.94	.00388
510.	16.5140	.02125	17.42	.00429	510.	17.7596	.02192	17.92	.00406
520.	16.0363	.02123	17.44	.00449	520.	17.2432	.02187	17.92	.00424
530.	15.5913	.02124	17.48	.00469	530.	16.7621	.02184	17.93	.00442
540.	15.1754	.02126	17.52	.00488	540.	16.3124	.02183	17.96	.00460

* Two Phase Boundary

Table 7. Transport Properties of Oxygen, Isobars, Engr. Units.

3000. psia Isobar					3200. psia Isobar				
Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h	Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h
* 102.058	82.3481	.12058	367.36	.00371	* 102.334	82.3994	.12077	369.96	.00371
105.	81.9240	.11897	352.49	.00368	105.	82.0163	.11932	356.29	.00369
110.	81.2090	.11641	328.08	.00364	110.	81.3039	.11676	331.54	.00365
115.	80.4986	.11401	304.99	.00361	115.	80.5966	.11438	308.16	.00362
120.	79.7905	.11175	283.39	.00358	120.	79.8923	.11213	286.31	.00359
125.	79.0832	.10960	263.33	.00355	125.	79.1890	.10998	266.04	.00356
130.	78.3755	.10752	244.82	.00352	130.	78.4858	.10792	247.33	.00353
135.	77.6665	.10550	227.80	.00349	135.	77.7816	.10592	230.14	.00350
140.	76.9556	.10353	212.19	.00346	140.	77.0759	.10396	214.38	.00347
145.	76.2423	.10159	197.89	.00343	145.	76.3680	.10204	199.96	.00345
150.	75.5260	.09968	184.81	.00340	150.	75.6575	.10014	186.76	.00342
155.	74.8065	.09778	172.85	.00337	155.	74.9441	.09826	174.69	.00339
160.	74.0833	.09589	161.90	.00334	160.	74.2274	.09639	163.65	.00336
165.	73.3561	.09401	151.88	.00331	165.	73.5070	.09452	153.54	.00333
170.	72.6245	.09213	142.70	.00328	170.	72.7827	.09266	144.28	.00329
175.	71.8881	.09025	134.27	.00324	175.	72.0540	.09080	135.79	.00326
180.	71.1466	.08837	126.52	.00320	180.	71.3207	.08893	127.98	.00322
185.	70.3995	.08649	119.40	.00316	185.	70.5822	.08707	120.80	.00319
190.	69.6464	.08460	112.83	.00312	190.	69.8382	.08520	114.19	.00315
195.	68.8866	.08272	106.77	.00308	195.	69.0883	.08334	108.08	.00311
200.	68.1197	.08083	101.16	.00304	200.	68.3319	.08147	102.43	.00307
205.	67.3450	.07894	95.96	.00299	205.	67.5685	.07960	97.20	.00302
210.	66.5620	.07705	91.13	.00295	210.	66.7975	.07773	92.34	.00298
215.	65.7699	.07516	86.64	.00290	215.	66.0184	.07587	87.83	.00293
220.	64.9681	.07328	82.45	.00285	220.	65.2306	.07401	83.62	.00288
225.	64.1558	.07140	78.55	.00280	225.	64.4334	.07215	79.70	.00283
230.	63.3322	.06952	74.89	.00275	230.	63.6261	.07031	76.02	.00278
235.	62.4967	.06766	71.46	.00269	235.	62.8082	.06847	72.59	.00273
240.	61.6484	.06581	68.24	.00264	240.	61.9789	.06664	69.36	.00268
245.	60.7864	.06397	65.21	.00259	245.	61.1376	.06483	66.32	.00263
250.	59.9102	.06215	62.36	.00253	250.	60.2837	.06304	63.47	.00258
255.	59.0188	.06034	59.67	.00248	255.	59.4166	.06126	60.77	.00252
260.	58.1116	.05857	57.12	.00242	260.	58.5357	.05951	58.23	.00247
265.	57.1880	.05683	54.71	.00237	265.	57.6405	.05780	55.82	.00242
270.	56.2473	.05513	52.43	.00231	270.	56.7307	.05613	53.54	.00237
275.	55.2890	.05351	50.26	.00226	275.	55.8058	.05453	51.38	.00232
280.	54.3129	.05191	48.20	.00221	280.	54.8657	.05295	49.33	.00227
285.	53.3186	.05024	46.24	.00216	285.	53.9103	.05131	47.39	.00222
290.	52.3062	.04862	44.37	.00211	290.	52.9397	.04972	45.53	.00217
295.	51.2757	.04705	42.60	.00206	295.	51.9541	.04818	43.77	.00213
300.	50.2276	.04553	40.91	.00202	300.	50.9540	.04669	42.10	.00209
310.	48.0814	.04265	37.77	.00194	310.	48.9132	.04385	38.99	.00201
320.	45.8772	.04000	34.92	.00187	320.	46.8260	.04123	36.18	.00194
330.	43.6323	.03760	32.36	.00182	330.	44.7063	.03885	33.64	.00189
340.	41.3731	.03547	30.07	.00179	340.	42.5745	.03671	31.37	.00186
350.	39.1350	.03358	28.05	.00179	350.	40.4572	.03481	29.35	.00185
360.	36.9593	.03193	26.30	.00182	360.	38.3858	.03314	27.59	.00187
370.	34.8856	.03048	24.80	.00187	370.	36.3921	.03167	26.05	.00191
380.	32.9447	.02921	23.54	.00195	380.	34.5033	.03038	24.74	.00197
390.	31.1545	.02810	22.50	.00205	390.	32.7384	.02925	23.64	.00205
400.	29.5203	.02713	21.64	.00216	400.	31.1070	.02826	22.71	.00215
410.	28.0381	.02629	20.94	.00229	410.	29.6101	.02739	21.94	.00226
420.	26.6980	.02557	20.37	.00243	420.	28.2429	.02663	21.30	.00239
430.	25.4870	.02495	19.91	.00257	430.	26.9967	.02597	20.78	.00252
440.	24.3913	.02442	19.54	.00272	440.	25.8612	.02540	20.35	.00265
450.	23.3976	.02398	19.24	.00288	450.	24.8254	.02492	20.00	.00279
460.	22.4935	.02362	19.01	.00304	460.	23.8787	.02451	19.72	.00294
470.	21.6681	.02332	18.82	.00320	470.	23.0111	.02417	19.49	.00309
480.	20.9117	.02307	18.68	.00336	480.	22.2138	.02388	19.31	.00324
490.	20.2160	.02288	18.57	.00353	490.	21.4788	.02364	19.16	.00339
500.	19.5738	.02272	18.49	.00369	500.	20.7991	.02345	19.05	.00354
510.	18.9790	.02260	18.44	.00386	510.	20.1687	.02329	18.97	.00370
520.	18.4267	.02252	18.41	.00403	520.	19.5822	.02317	18.91	.00386
530.	17.9109	.02245	18.40	.00420	530.	19.0350	.02307	18.88	.00401
540.	17.4291	.02242	18.40	.00437	540.	18.5231	.02301	18.86	.00417

* Two Phase Boundary

Table 7. Transport Properties of Oxygen, Isobars, Engr. Units.

3400. psia Isobar					3600. psia Isobar				
Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h	Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h
* 102.610	82.4503	.12096	372.53	.00372	* 102.884	82.5010	.12115	375.08	.00372
105.	82.1079	.11967	360.10	.00370	105.	82.1988	.12001	363.93	.00370
110.	81.3980	.11712	335.01	.00366	110.	81.4914	.11747	338.48	.00367
115.	80.6939	.11474	311.34	.00363	115.	80.7903	.11510	314.52	.00364
120.	79.9931	.11250	289.23	.00360	120.	80.0930	.11287	292.16	.00361
125.	79.2938	.11037	268.74	.00357	125.	79.3977	.11075	271.45	.00358
130.	78.5950	.10831	249.85	.00354	130.	78.7030	.10871	252.37	.00355
135.	77.8955	.10633	232.49	.00352	135.	78.0081	.10673	234.83	.00353
140.	77.1947	.10438	216.58	.00349	140.	77.3123	.10480	218.77	.00350
145.	76.4922	.10248	202.02	.00346	145.	76.6149	.10291	204.08	.00348
150.	75.7873	.10054	188.70	.00343	150.	75.9155	.10104	190.64	.00345
155.	75.0799	.09873	176.53	.00341	155.	75.2139	.09919	178.36	.00342
160.	74.3694	.09687	165.39	.00338	160.	74.5095	.09736	167.13	.00339
165.	73.6557	.09502	155.20	.00335	165.	73.8022	.09552	156.85	.00336
170.	72.9384	.09318	145.86	.00331	170.	73.0917	.09369	147.44	.00333
175.	72.2171	.09133	137.30	.00328	175.	72.3776	.09187	138.80	.00330
180.	71.4916	.08949	129.43	.00325	180.	71.6596	.09004	130.88	.00327
185.	70.7615	.08764	122.20	.00321	185.	70.9375	.08821	123.59	.00323
190.	70.0263	.08580	115.53	.00317	190.	70.2108	.08638	116.87	.00319
195.	69.2858	.08395	109.38	.00313	195.	69.4793	.08455	110.67	.00316
200.	68.5394	.08210	103.70	.00309	200.	68.7424	.08272	104.95	.00312
205.	67.7867	.08025	98.43	.00305	205.	67.9999	.08089	99.65	.00308
210.	67.0272	.07841	93.54	.00301	210.	67.2512	.07907	94.73	.00303
215.	66.2603	.07656	89.00	.00296	215.	66.4960	.07725	90.16	.00299
220.	65.4856	.07472	84.77	.00291	220.	65.7336	.07543	85.91	.00295
225.	64.7025	.07289	80.83	.00287	225.	64.9638	.07362	81.94	.00290
230.	63.9104	.07107	77.14	.00282	230.	64.1859	.07182	78.24	.00285
235.	63.1088	.06926	73.69	.00277	235.	63.3996	.07002	74.77	.00281
240.	62.2972	.06745	70.45	.00272	240.	62.6043	.06825	71.52	.00276
245.	61.4749	.06567	67.41	.00267	245.	61.7996	.06648	68.47	.00271
250.	60.6415	.06390	64.55	.00262	250.	60.9850	.06474	65.60	.00266
255.	59.7965	.06215	61.85	.00257	255.	60.1602	.06302	62.90	.00261
260.	58.9394	.06043	59.31	.00252	260.	59.3249	.06132	60.35	.00256
265.	58.0699	.05874	56.90	.00247	265.	58.4787	.05965	57.95	.00252
270.	57.1877	.05710	54.63	.00242	270.	57.6214	.05803	55.67	.00247
275.	56.2925	.05551	52.47	.00237	275.	56.7530	.05646	53.52	.00242
280.	55.3844	.05395	50.43	.00233	280.	55.8733	.05492	51.48	.00238
285.	54.4632	.05234	48.49	.00228	285.	54.9825	.05334	49.54	.00233
290.	53.5291	.05078	46.64	.00223	290.	54.0808	.05180	47.71	.00229
295.	52.5825	.04926	44.89	.00219	295.	53.1684	.05031	45.96	.00225
300.	51.6238	.04779	43.23	.00215	300.	52.2460	.04886	44.31	.00221
310.	49.6731	.04500	40.14	.00207	310.	50.3734	.04610	41.24	.00214
320.	47.6848	.04241	37.35	.00201	320.	48.4701	.04353	38.47	.00207
330.	45.6706	.04004	34.84	.00196	330.	46.5464	.04118	35.97	.00202
340.	43.6469	.03790	32.58	.00193	340.	44.6155	.03904	33.72	.00199
350.	41.6344	.03599	30.57	.00192	350.	42.6942	.03713	31.71	.00197
360.	39.6575	.03430	28.79	.00192	360.	40.8019	.03542	29.92	.00198
370.	37.7416	.03281	27.23	.00195	370.	38.9591	.03391	28.35	.00200
380.	35.9100	.03150	25.88	.00200	380.	37.1856	.03258	26.97	.00204
390.	34.1809	.03035	24.73	.00207	390.	35.4976	.03140	25.78	.00209
400.	32.5654	.02933	23.75	.00215	400.	33.9067	.03036	24.75	.00216
410.	31.0681	.02844	22.92	.00225	410.	32.4191	.02944	23.87	.00225
420.	29.6877	.02765	22.23	.00236	420.	31.0364	.02863	23.13	.00235
430.	28.4193	.02696	21.65	.00248	430.	29.7561	.02791	22.50	.00245
440.	27.2553	.02636	21.16	.00260	440.	28.5734	.02728	21.97	.00256
450.	26.1872	.02584	20.76	.00273	450.	27.4817	.02673	21.52	.00268
460.	25.2061	.02539	20.43	.00286	460.	26.4739	.02625	21.15	.00280
470.	24.3034	.02500	20.16	.00300	470.	25.5427	.02583	20.84	.00293
480.	23.4710	.02468	19.94	.00314	480.	24.6810	.02547	20.58	.00306
490.	22.7016	.02440	19.76	.00328	490.	23.8821	.02515	20.37	.00319
500.	21.9886	.02417	19.62	.00342	500.	23.1399	.02489	20.20	.00332
510.	21.3260	.02398	19.51	.00357	510.	22.4489	.02467	20.06	.00346
520.	20.7088	.02382	19.43	.00371	520.	21.8040	.02448	19.95	.00359
530.	20.1322	.02370	19.37	.00386	530.	21.2008	.02432	19.86	.00373
540.	19.5924	.02360	19.33	.00401	540.	20.6353	.02420	19.80	.00387

* Two Phase Boundary

Table 7. Transport Properties of Oxygen, Isobars, Engr. Units.

3800. psia Isobar					4000. psia Isobar				
Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h	Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h
* 103.159	82.5513	.12135	377.61	.00373	* 103.433	82.6013	.12154	380.12	.00373
105.	82.2892	.12036	367.77	.00371	105.	82.3788	.12070	371.63	.00372
110.	81.5841	.11782	341.97	.00368	110.	81.6760	.11816	345.47	.00368
115.	80.8859	.11546	317.71	.00364	115.	80.9807	.11581	320.91	.00365
120.	80.1920	.11324	295.10	.00362	120.	80.2902	.11360	298.04	.00363
125.	79.5005	.11113	274.17	.00359	125.	79.6024	.11150	276.88	.00360
130.	78.8100	.10910	254.88	.00356	130.	78.9159	.10949	257.40	.00358
135.	78.1196	.10714	237.18	.00354	135.	78.2299	.10754	239.53	.00355
140.	77.4285	.10522	220.97	.00351	140.	77.5435	.10564	223.16	.00353
145.	76.7362	.10334	206.14	.00349	145.	76.8561	.10377	208.19	.00350
150.	76.0422	.10149	192.58	.00346	150.	76.1673	.10193	194.51	.00348
155.	75.3461	.09966	180.19	.00344	155.	75.4767	.10011	182.01	.00345
160.	74.6477	.09783	168.86	.00341	160.	74.7841	.09831	170.59	.00343
165.	73.9467	.09602	158.50	.00338	165.	74.0891	.09651	160.14	.00340
170.	73.2427	.09420	149.00	.00335	170.	73.3915	.09471	150.57	.00337
175.	72.5355	.09239	140.30	.00332	175.	72.6910	.09291	141.79	.00334
180.	71.8248	.09058	132.31	.00329	180.	71.9874	.09112	133.74	.00331
185.	71.1104	.08877	124.96	.00325	185.	71.2804	.08933	126.34	.00327
190.	70.3919	.08696	118.20	.00322	190.	70.5697	.08753	119.52	.00324
195.	69.6690	.08515	111.96	.00318	195.	69.8550	.08574	113.23	.00320
200.	68.9413	.08334	106.19	.00314	200.	69.1360	.08394	107.43	.00317
205.	68.2084	.08153	100.85	.00310	205.	68.4125	.08215	102.05	.00313
210.	67.4700	.07972	95.91	.00306	210.	67.6839	.08036	97.07	.00309
215.	66.7258	.07792	91.31	.00302	215.	66.9501	.07858	92.44	.00305
220.	65.9752	.07612	87.03	.00298	220.	66.2105	.07680	88.14	.00301
225.	65.2178	.07433	83.04	.00293	225.	65.4650	.07503	84.13	.00296
230.	64.4533	.07255	79.32	.00289	230.	64.7130	.07326	80.39	.00292
235.	63.6812	.07078	75.84	.00284	235.	63.9543	.07151	76.89	.00288
240.	62.9011	.06902	72.58	.00279	240.	63.1885	.06978	73.61	.00283
245.	62.1127	.06728	69.51	.00275	245.	62.4153	.06806	70.54	.00278
250.	61.3156	.06556	66.64	.00270	250.	61.6343	.06636	67.65	.00274
255.	60.5095	.06386	63.93	.00265	255.	60.8454	.06468	64.93	.00269
260.	59.6940	.06218	61.38	.00261	260.	60.0483	.06302	62.38	.00265
265.	58.8691	.06054	58.97	.00256	265.	59.2429	.06140	59.96	.00260
270.	58.0345	.05893	56.69	.00252	270.	58.4291	.05981	57.68	.00256
275.	57.1902	.05738	54.54	.00247	275.	57.6068	.05827	55.53	.00252
280.	56.3362	.05586	52.50	.00243	280.	56.7760	.05676	53.49	.00248
285.	55.4726	.05430	50.57	.00239	285.	55.9371	.05523	51.56	.00244
290.	54.5997	.05278	48.73	.00234	290.	55.0901	.05373	49.72	.00239
295.	53.7178	.05131	46.99	.00230	295.	54.2354	.05228	47.99	.00236
300.	52.8274	.04988	45.34	.00226	300.	53.3736	.05087	46.34	.00232
310.	51.0234	.04715	42.28	.00219	310.	51.6305	.04817	43.29	.00225
320.	49.1944	.04462	39.52	.00213	320.	49.8669	.04566	40.53	.00219
330.	47.3491	.04228	37.04	.00209	330.	48.0905	.04333	38.05	.00214
340.	45.4988	.04015	34.79	.00205	340.	46.3112	.04121	35.82	.00211
350.	43.6575	.03822	32.79	.00203	350.	44.5404	.03928	33.81	.00209
360.	41.8408	.03650	30.99	.00203	360.	42.7913	.03755	32.01	.00208
370.	40.0656	.03497	29.40	.00204	370.	41.0780	.03600	30.41	.00209
380.	38.3484	.03362	28.00	.00207	380.	39.4143	.03462	28.99	.00211
390.	36.7036	.03242	26.78	.00212	390.	37.8128	.03340	27.74	.00215
400.	35.1423	.03135	25.71	.00218	400.	36.2838	.03232	26.64	.00220
410.	33.6716	.03041	24.80	.00226	410.	34.8345	.03135	25.69	.00227
420.	32.2946	.02958	24.01	.00234	420.	33.4688	.03049	24.86	.00234
430.	31.0107	.02883	23.33	.00244	430.	32.1879	.02973	24.15	.00243
440.	29.8173	.02818	22.76	.00254	440.	30.9902	.02905	23.54	.00252
450.	28.7096	.02760	22.27	.00265	450.	29.8728	.02844	23.01	.00262
460.	27.6820	.02709	21.86	.00276	460.	28.8313	.02791	22.57	.00272
470.	26.7284	.02664	21.51	.00287	470.	27.8608	.02743	22.18	.00283
480.	25.8428	.02624	21.22	.00299	480.	26.9562	.02701	21.86	.00294
490.	25.0191	.02590	20.98	.00312	490.	26.1121	.02664	21.58	.00306
500.	24.2519	.02561	20.77	.00324	500.	25.3238	.02632	21.35	.00317
510.	23.5359	.02535	20.61	.00337	510.	24.5863	.02604	21.16	.00329
520.	22.8664	.02514	20.47	.00349	520.	23.8954	.02579	21.00	.00341
530.	22.2393	.02495	20.36	.00362	530.	23.2470	.02558	20.87	.00353
540.	21.6506	.02480	20.28	.00375	540.	22.6374	.02540	20.76	.00365

* Two Phase Boundary

Table 7. Transport Properties of Oxygen, Isobars, Engr. Units.

	4500. psia Isobar					5000. psia Isobar				
	Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h	Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h
*	104.115	82.7251	.12202	386.30	.00374	* 104.793	82.8470	.12249	392.34	.00375
	105.	82.6003	.12155	381.34	.00373	105.	82.8181	.12239	391.14	.00375
	110.	81.9029	.11903	354.27	.00370	110.	82.1256	.11988	363.14	.00372
	115.	81.2144	.11669	328.94	.00367	115.	81.4435	.11756	337.02	.00369
	120.	80.5318	.11451	305.41	.00365	120.	80.7684	.11540	312.81	.00367
	125.	79.8530	.11243	283.68	.00363	125.	80.0979	.11335	290.50	.00365
	130.	79.1763	.11045	263.70	.00360	130.	79.4305	.11139	270.02	.00363
	135.	78.5007	.10853	245.39	.00358	135.	78.7648	.10950	251.25	.00361
	140.	77.8255	.10666	228.63	.00356	140.	78.1001	.10766	234.10	.00359
	145.	77.1499	.10483	213.32	.00354	145.	77.4357	.10587	218.44	.00357
	150.	76.4736	.10303	199.34	.00351	150.	76.7711	.10410	204.14	.00355
	155.	75.7961	.10124	186.56	.00349	155.	76.1059	.10235	191.09	.00352
	160.	75.1172	.09947	174.89	.00346	160.	75.4399	.10061	179.17	.00350
	165.	74.4366	.09771	164.22	.00344	165.	74.7728	.09888	168.27	.00348
	170.	73.7541	.09595	154.45	.00341	170.	74.1043	.09716	158.30	.00345
	175.	73.0695	.09419	145.50	.00338	175.	73.4344	.09544	149.16	.00343
	180.	72.3825	.09244	137.28	.00335	180.	72.7627	.09372	140.79	.00340
	185.	71.6929	.09068	129.73	.00332	185.	72.0892	.09200	133.09	.00337
	190.	71.0006	.08893	122.79	.00329	190.	71.4137	.09028	126.01	.00334
	195.	70.3052	.08717	116.38	.00326	195.	70.7359	.08857	119.48	.00331
	200.	69.6066	.08542	110.47	.00322	200.	70.0558	.08685	113.46	.00328
	205.	68.9045	.08367	105.00	.00319	205.	69.3730	.08514	107.89	.00325
	210.	68.1986	.08192	99.93	.00315	210.	68.6875	.08343	102.74	.00321
	215.	67.4887	.08018	95.23	.00311	215.	67.9989	.08173	97.95	.00318
	220.	66.7745	.07844	90.86	.00308	220.	67.3073	.08003	93.51	.00314
	225.	66.0558	.07672	86.79	.00304	225.	66.6122	.07834	89.38	.00310
	230.	65.3323	.07500	82.99	.00300	230.	65.9136	.07666	85.52	.00307
	235.	64.6037	.07330	79.45	.00295	235.	65.2112	.07500	81.93	.00303
	240.	63.8698	.07160	76.13	.00291	240.	64.5050	.07335	78.56	.00299
	245.	63.1304	.06993	73.02	.00287	245.	63.7947	.07171	75.41	.00295
	250.	62.3854	.06828	70.10	.00283	250.	63.0803	.07010	72.46	.00291
	255.	61.6345	.06664	67.36	.00279	255.	62.3617	.06850	69.68	.00287
	260.	60.8776	.06503	64.78	.00275	260.	61.6387	.06693	67.08	.00283
	265.	60.1148	.06345	62.35	.00270	265.	60.9114	.06539	64.62	.00280
	270.	59.3458	.06191	60.06	.00266	270.	60.1798	.06388	62.31	.00276
	275.	58.5709	.06040	57.89	.00263	275.	59.4440	.06241	60.12	.00272
	280.	57.7901	.05893	55.84	.00259	280.	58.7040	.06096	58.06	.00269
	285.	57.0035	.05744	53.91	.00255	285.	57.9601	.05951	56.11	.00265
	290.	56.2115	.05599	52.07	.00251	290.	57.2124	.05810	54.27	.00262
	295.	55.4142	.05458	50.33	.00247	295.	56.4613	.05672	52.52	.00258
	300.	54.6122	.05320	48.68	.00244	300.	55.7070	.05538	50.86	.00255
	310.	52.9958	.05058	45.64	.00238	310.	54.1909	.05281	47.80	.00249
	320.	51.3670	.04811	42.89	.00232	320.	52.6677	.05039	45.04	.00244
	330.	49.7318	.04582	40.41	.00227	330.	51.1423	.04813	42.56	.00239
	340.	48.0973	.04371	38.17	.00224	340.	49.6200	.04604	40.31	.00236
	350.	46.4715	.04178	36.16	.00221	350.	48.1069	.04411	38.28	.00233
	360.	44.8634	.04003	34.35	.00220	360.	46.6095	.04234	36.46	.00231
	370.	43.2822	.03844	32.72	.00220	370.	45.1345	.04073	34.81	.00231
	380.	41.7375	.03702	31.26	.00221	380.	43.6886	.03928	33.32	.00231
	390.	40.2381	.03575	29.97	.00224	390.	42.2784	.03796	31.99	.00232
	400.	38.7919	.03461	28.81	.00227	400.	40.9098	.03678	30.80	.00235
	410.	37.4053	.03359	27.79	.00232	410.	39.5877	.03571	29.73	.00238
	420.	36.0827	.03268	26.90	.00238	420.	38.3164	.03475	28.77	.00243
	430.	34.8269	.03186	26.11	.00244	430.	37.0987	.03388	27.93	.00248
	440.	33.6386	.03113	25.41	.00252	440.	35.9362	.03310	27.17	.00254
	450.	32.5173	.03047	24.81	.00259	450.	34.8296	.03240	26.51	.00260
	460.	31.4613	.02988	24.28	.00268	460.	33.7784	.03176	25.92	.00267
	470.	30.4678	.02935	23.82	.00277	470.	32.7816	.03118	25.40	.00274
	480.	29.5336	.02887	23.43	.00286	480.	31.8372	.03065	24.94	.00282
	490.	28.6553	.02844	23.08	.00296	490.	30.9430	.03018	24.54	.00290
	500.	27.8293	.02806	22.78	.00306	500.	30.0967	.02974	24.18	.00299
	510.	27.0518	.02772	22.53	.00316	510.	29.2956	.02935	23.87	.00307
	520.	26.3195	.02741	22.31	.00326	520.	28.5369	.02899	23.60	.00316
	530.	25.6290	.02714	22.12	.00336	530.	27.8182	.02867	23.37	.00325
	540.	24.9771	.02690	21.97	.00346	540.	27.1367	.02838	23.17	.00334

* Two Phase Boundary

Table 7. Transport Properties of Oxygen, Isobars, Engr. Units.

6000. psia Isobar					7000. psia Isobar				
Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h	Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h
* 106.140	83.0854	.12345	404.01	.00377	* 107.474	83.3167	.12439	415.12	.00379
110.	82.5589	.12155	381.06	.00375	110.	82.9774	.12318	399.26	.00378
115.	81.8884	.11926	353.30	.00373	115.	82.3168	.12092	369.78	.00376
120.	81.2270	.11714	327.71	.00371	120.	81.6676	.11883	342.72	.00375
125.	80.5720	.11514	304.20	.00370	125.	81.0265	.11687	317.97	.00374
130.	79.9215	.11323	282.67	.00368	130.	80.3913	.11502	295.36	.00372
135.	79.2741	.11140	262.99	.00366	135.	79.7604	.11323	274.73	.00371
140.	78.6289	.10962	245.03	.00365	140.	79.1326	.11151	255.94	.00370
145.	77.9850	.10788	228.65	.00363	145.	78.5072	.10983	238.83	.00368
150.	77.3419	.10618	213.72	.00361	150.	77.8834	.10818	223.24	.00367
155.	76.6993	.10449	200.09	.00359	155.	77.2610	.10655	209.03	.00365
160.	76.0567	.10282	187.66	.00357	160.	76.6394	.10494	196.07	.00364
165.	75.4141	.10116	176.30	.00355	165.	76.0185	.10334	184.24	.00362
170.	74.7711	.09950	165.92	.00353	170.	75.3980	.10175	173.44	.00360
175.	74.1276	.09785	156.41	.00351	175.	74.7778	.10015	163.54	.00358
180.	73.4835	.09620	147.69	.00349	180.	74.1578	.09856	154.48	.00356
185.	72.8387	.09454	139.69	.00346	185.	73.5379	.09697	146.17	.00354
190.	72.1929	.09289	132.33	.00344	190.	72.9179	.09538	138.52	.00352
195.	71.5462	.09124	125.56	.00341	195.	72.2979	.09379	131.49	.00350
200.	70.8984	.08960	119.31	.00338	200.	71.6777	.09220	125.00	.00347
205.	70.2494	.08795	113.53	.00335	205.	71.0572	.09061	119.01	.00345
210.	69.5990	.08631	108.19	.00332	210.	70.4364	.08903	113.48	.00342
215.	68.9472	.08467	103.24	.00329	215.	69.8153	.08745	108.35	.00340
220.	68.2939	.08304	98.64	.00326	220.	69.1937	.08588	103.59	.00337
225.	67.6389	.08142	94.37	.00323	225.	68.5716	.08431	99.16	.00334
230.	66.9821	.07981	90.39	.00320	230.	67.9490	.08275	95.05	.00331
235.	66.3235	.07821	86.68	.00316	235.	67.3258	.08121	91.21	.00328
240.	65.6631	.07663	83.21	.00313	240.	66.7020	.07968	87.63	.00325
245.	65.0006	.07506	79.97	.00309	245.	66.0775	.07816	84.29	.00322
250.	64.3361	.07351	76.93	.00306	250.	65.4523	.07667	81.15	.00319
255.	63.6696	.07198	74.08	.00303	255.	64.8265	.07519	78.22	.00316
260.	63.0009	.07047	71.41	.00299	260.	64.2001	.07373	75.46	.00313
265.	62.3303	.06899	68.89	.00296	265.	63.5730	.07229	72.87	.00310
270.	61.6576	.06753	66.52	.00293	270.	62.9453	.07088	70.44	.00307
275.	60.9831	.06611	64.29	.00289	275.	62.3171	.06950	68.15	.00304
280.	60.3067	.06471	62.18	.00286	280.	61.6886	.06814	65.98	.00301
285.	59.6286	.06333	60.19	.00283	285.	61.0597	.06680	63.94	.00298
290.	58.9491	.06197	58.31	.00280	290.	60.4306	.06549	62.01	.00296
295.	58.2682	.06064	56.53	.00277	295.	59.8015	.06420	60.19	.00293
300.	57.5864	.05935	54.85	.00274	300.	59.1725	.06295	58.46	.00290
310.	56.2206	.05687	51.73	.00269	310.	57.9159	.06053	55.28	.00285
320.	54.8544	.05452	48.93	.00264	320.	56.6625	.05824	52.42	.00281
330.	53.4908	.05232	46.41	.00260	330.	55.4144	.05607	49.83	.00277
340.	52.1334	.05026	44.12	.00256	340.	54.1741	.05404	47.49	.00273
350.	50.7858	.04834	42.06	.00253	350.	52.9440	.05214	45.38	.00271
360.	49.4520	.04656	40.19	.00251	360.	51.7268	.05036	43.46	.00268
370.	48.1361	.04493	38.49	.00250	370.	50.5251	.04871	41.71	.00267
380.	46.8420	.04343	36.96	.00249	380.	49.3416	.04719	40.13	.00266
390.	45.5735	.04205	35.57	.00250	390.	48.1788	.04577	38.69	.00265
400.	44.3342	.04080	34.31	.00251	400.	47.0390	.04447	37.37	.00266
410.	43.1273	.03965	33.17	.00253	410.	45.9245	.04327	36.18	.00267
420.	41.9556	.03861	32.14	.00255	420.	44.8370	.04216	35.09	.00268
430.	40.8213	.03766	31.21	.00258	430.	43.7783	.04115	34.10	.00270
440.	39.7262	.03679	30.37	.00262	440.	42.7496	.04021	33.20	.00273
450.	38.6713	.03600	29.62	.00266	450.	41.7519	.03935	32.38	.00276
460.	37.6574	.03528	28.93	.00271	460.	40.7861	.03856	31.64	.00279
470.	36.6845	.03462	28.32	.00276	470.	39.8523	.03783	30.96	.00283
480.	35.7522	.03401	27.77	.00282	480.	38.9508	.03715	30.34	.00287
490.	34.8599	.03346	27.28	.00288	490.	38.0814	.03652	29.78	.00291
500.	34.0064	.03294	26.84	.00294	500.	37.2437	.03594	29.28	.00296
510.	33.1906	.03247	26.44	.00301	510.	36.4372	.03540	28.81	.00301
520.	32.4109	.03203	26.09	.00307	520.	35.6610	.03490	28.40	.00306
530.	31.6659	.03163	25.77	.00314	530.	34.9143	.03443	28.02	.00311
540.	30.9539	.03126	25.49	.00321	540.	34.1962	.03399	27.67	.00317

* Two Phase Boundary

Table 7. Transport Properties of Oxygen, Isobars, Engr. Units.

8000. psia Isobar					9000. psia Isobar				
Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h	Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h
* 108.796	83.5415	.12534	425.69	.00380					
110.	83.3820	.12477	417.72	.00380	* 110.105	83.7601	.12628	435.73	.00382
115.	82.7302	.12254	386.43	.00379	115.	83.1295	.12412	403.28	.00382
120.	82.0917	.12048	357.87	.00378	120.	82.5007	.12209	373.14	.00382
125.	81.4631	.11856	331.82	.00378	125.	81.8833	.12021	345.75	.00381
130.	80.8416	.11675	308.09	.00377	130.	81.2743	.11843	320.87	.00381
135.	80.2256	.11501	286.49	.00376	135.	80.6718	.11674	298.27	.00380
140.	79.6137	.11334	266.85	.00375	140.	80.0743	.11512	277.75	.00379
145.	79.0050	.11171	248.98	.00374	145.	79.4808	.11354	259.11	.00379
150.	78.3987	.11012	232.72	.00373	150.	78.8905	.11200	242.17	.00378
155.	77.7945	.10855	217.91	.00371	155.	78.3027	.11047	226.75	.00377
160.	77.1918	.10699	204.42	.00370	160.	77.7171	.10897	212.71	.00376
165.	76.5903	.10545	192.11	.00369	165.	77.1333	.10748	199.91	.00375
170.	75.9900	.10391	180.87	.00367	170.	76.5512	.10599	188.23	.00373
175.	75.3906	.10237	170.59	.00366	175.	75.9704	.10450	177.55	.00372
180.	74.7920	.10083	161.17	.00364	180.	75.3910	.10302	167.77	.00371
185.	74.1940	.09930	152.53	.00362	185.	74.8127	.10153	158.81	.00369
190.	73.5967	.09776	144.60	.00360	190.	74.2355	.10005	150.58	.00368
195.	73.0000	.09622	137.30	.00358	195.	73.6594	.09856	143.01	.00366
200.	72.4037	.09469	130.57	.00356	200.	73.0843	.09707	136.03	.00364
205.	71.8080	.09315	124.36	.00354	205.	72.5102	.09558	129.60	.00362
210.	71.2126	.09162	118.62	.00351	210.	71.9371	.09409	123.65	.00360
215.	70.6176	.09009	113.31	.00349	215.	71.3648	.09261	118.14	.00358
220.	70.0230	.08856	108.38	.00347	220.	70.7935	.09113	113.04	.00356
225.	69.4286	.08705	103.80	.00344	225.	70.2231	.08965	108.30	.00353
230.	68.8346	.08554	99.54	.00341	230.	69.6535	.08819	103.90	.00351
235.	68.2409	.08404	95.57	.00339	235.	69.0849	.08673	99.80	.00349
240.	67.6474	.08255	91.87	.00336	240.	68.5170	.08528	95.97	.00346
245.	67.0541	.08108	88.42	.00333	245.	67.9501	.08385	92.40	.00344
250.	66.4611	.07963	85.18	.00331	250.	67.3841	.08243	89.06	.00341
255.	65.8683	.07819	82.15	.00328	255.	66.8189	.08103	85.93	.00339
260.	65.2759	.07677	79.31	.00325	260.	66.2547	.07964	83.00	.00336
265.	64.6837	.07537	76.64	.00323	265.	65.6914	.07828	80.24	.00334
270.	64.0919	.07400	74.13	.00320	270.	65.1290	.07693	77.65	.00331
275.	63.5005	.07265	71.77	.00317	275.	64.5677	.07561	75.22	.00329
280.	62.9095	.07133	69.55	.00315	280.	64.0075	.07431	72.93	.00327
285.	62.3192	.07002	67.45	.00312	285.	63.4485	.07303	70.76	.00324
290.	61.7295	.06874	65.46	.00309	290.	62.8906	.07178	68.72	.00322
295.	61.1405	.06748	63.59	.00307	295.	62.3341	.07055	66.79	.00320
300.	60.5525	.06626	61.82	.00305	300.	61.7789	.06934	64.97	.00317
310.	59.3797	.06389	58.55	.00300	310.	60.6732	.06702	61.60	.00313
320.	58.2124	.06164	55.61	.00296	320.	59.5745	.06480	58.58	.00309
330.	57.0522	.05951	52.95	.00292	330.	58.4838	.06270	55.85	.00306
340.	55.9005	.05750	50.55	.00289	340.	57.4024	.06071	53.38	.00302
350.	54.7593	.05561	48.38	.00286	350.	56.3315	.05883	51.14	.00300
360.	53.6304	.05384	46.40	.00284	360.	55.2725	.05706	49.11	.00297
370.	52.5157	.05218	44.61	.00282	370.	54.2266	.05540	47.26	.00295
380.	51.4169	.05064	42.97	.00281	380.	53.1954	.05384	45.57	.00294
390.	50.3359	.04920	41.48	.00280	390.	52.1799	.05238	44.03	.00293
400.	49.2744	.04786	40.12	.00280	400.	51.1815	.05101	42.62	.00292
410.	48.2338	.04661	38.88	.00280	410.	50.2013	.04974	41.33	.00292
420.	47.2155	.04546	37.74	.00281	420.	49.2403	.04855	40.15	.00293
430.	46.2207	.04439	36.70	.00282	430.	48.2994	.04743	39.06	.00293
440.	45.2505	.04340	35.75	.00284	440.	47.3794	.04640	38.07	.00294
450.	44.3055	.04248	34.88	.00286	450.	46.4807	.04543	37.15	.00296
460.	43.3864	.04163	34.08	.00288	460.	45.6041	.04452	36.31	.00297
470.	42.4937	.04084	33.35	.00291	470.	44.7497	.04368	35.54	.00299
480.	41.6274	.04010	32.68	.00294	480.	43.9178	.04288	34.83	.00301
490.	40.7877	.03941	32.07	.00297	490.	43.1085	.04214	34.17	.00304
500.	39.9744	.03877	31.51	.00301	500.	42.3218	.04144	33.57	.00307
510.	39.1873	.03817	31.00	.00304	510.	41.5576	.04078	33.02	.00309
520.	38.4259	.03760	30.53	.00308	520.	40.8155	.04016	32.51	.00313
530.	37.6898	.03707	30.10	.00312	530.	40.0954	.03958	32.04	.00316
540.	36.9783	.03658	29.71	.00317	540.	39.3967	.03903	31.61	.00319

* Two Phase Boundary

Table 7. Transport Properties of Oxygen, Isobars, Engr. Units.

Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h
10000. psia Isobar				
* 111.403	83.9729	.12722	445.26	.00384
115.	83.5161	.12566	420.32	.00384
120.	82.8957	.12366	388.54	.00384
125.	82.2884	.12181	359.76	.00384
130.	81.6907	.12008	333.70	.00384
135.	81.1006	.11843	310.08	.00384
140.	80.5163	.11685	288.66	.00384
145.	79.9367	.11531	269.23	.00383
150.	79.3608	.11382	251.58	.00383
155.	78.7882	.11234	235.55	.00382
160.	78.2182	.11089	220.95	.00381
165.	77.6505	.10944	207.66	.00380
170.	77.0848	.10800	195.53	.00379
175.	76.5210	.10657	184.44	.00378
180.	75.9589	.10513	174.30	.00377
185.	75.3983	.10369	165.01	.00376
190.	74.8393	.10225	156.47	.00374
195.	74.2817	.10081	148.63	.00373
200.	73.7255	.09936	141.40	.00371
205.	73.1707	.09792	134.73	.00370
210.	72.6172	.09647	128.58	.00368
215.	72.0650	.09503	122.88	.00366
220.	71.5142	.09359	117.60	.00364
225.	70.9647	.09215	112.70	.00362
230.	70.4164	.09072	108.14	.00360
235.	69.8695	.08930	103.90	.00358
240.	69.3239	.08789	99.94	.00356
245.	68.7797	.08649	96.25	.00353
250.	68.2367	.08510	92.80	.00351
255.	67.6951	.08372	89.57	.00349
260.	67.1548	.08237	86.54	.00347
265.	66.6160	.08103	83.70	.00344
270.	66.0785	.07971	81.03	.00342
275.	65.5425	.07842	78.52	.00340
280.	65.0080	.07714	76.15	.00337
285.	64.4751	.07588	73.93	.00335
290.	63.9437	.07465	71.82	.00333
295.	63.4140	.07344	69.83	.00331
300.	62.8861	.07225	67.95	.00329
310.	61.8357	.06996	64.49	.00325
320.	60.7932	.06777	61.37	.00321
330.	59.7595	.06569	58.57	.00318
340.	58.7355	.06371	56.03	.00315
350.	57.7219	.06184	53.72	.00312
360.	56.7200	.06007	51.63	.00310
370.	55.7305	.05840	49.72	.00308
380.	54.7546	.05683	47.98	.00306
390.	53.7931	.05536	46.39	.00305
400.	52.8470	.05397	44.94	.00304
410.	51.9172	.05267	43.60	.00304
420.	51.0043	.05145	42.37	.00304
430.	50.1091	.05030	41.25	.00304
440.	49.2322	.04922	40.21	.00304
450.	48.3741	.04821	39.25	.00305
460.	47.5350	.04726	38.37	.00306
470.	46.7154	.04636	37.56	.00308
480.	45.9154	.04552	36.81	.00309
490.	45.1350	.04473	36.12	.00311
500.	44.3744	.04398	35.48	.00313
510.	43.6335	.04327	34.89	.00315
520.	42.9120	.04260	34.35	.00318
530.	42.2098	.04196	33.84	.00320
540.	41.5267	.04136	33.37	.00323
11000. psia Isobar				
* 112.688	84.1803	.12815	454.28	.00385
115.	83.8907	.12718	437.57	.00386
120.	83.2779	.12520	404.08	.00387
125.	82.6796	.12338	373.87	.00387
130.	82.0923	.12168	346.58	.00387
135.	81.5134	.12007	321.91	.00388
140.	80.9412	.11853	299.57	.00388
145.	80.3743	.11704	279.33	.00387
150.	79.8118	.11558	260.98	.00387
155.	79.2530	.11416	244.31	.00387
160.	78.6973	.11275	229.15	.00386
165.	78.1444	.11135	215.35	.00386
170.	77.5938	.10996	202.77	.00385
175.	77.0455	.10857	191.28	.00384
180.	76.4992	.10717	180.76	.00383
185.	75.9547	.10578	171.13	.00382
190.	75.4121	.10438	162.29	.00381
195.	74.8712	.10298	154.17	.00380
200.	74.3321	.10158	146.69	.00378
205.	73.7946	.10017	139.79	.00377
210.	73.2587	.09877	133.42	.00375
215.	72.7245	.09736	127.52	.00374
220.	72.1919	.09595	122.06	.00372
225.	71.6609	.09455	116.99	.00370
230.	71.1316	.09315	112.28	.00368
235.	70.6038	.09176	107.90	.00366
240.	70.0777	.09038	103.81	.00364
245.	69.5532	.08901	100.00	.00362
250.	69.0304	.08765	96.44	.00360
255.	68.5092	.08631	93.10	.00358
260.	67.9898	.08497	89.98	.00356
265.	67.4720	.08366	87.04	.00354
270.	66.9559	.08236	84.29	.00352
275.	66.4416	.08109	81.70	.00350
280.	65.9291	.07983	79.26	.00348
285.	65.4184	.07859	76.96	.00345
290.	64.9095	.07738	74.79	.00343
295.	64.4026	.07618	72.75	.00341
300.	63.8977	.07501	70.81	.00339
310.	62.8939	.07275	67.24	.00336
320.	61.8988	.07058	64.03	.00332
330.	60.9129	.06851	61.14	.00329
340.	59.9368	.06655	58.53	.00326
350.	58.9713	.06468	56.16	.00323
360.	58.0170	.06291	54.00	.00321
370.	57.0748	.06124	52.04	.00319
380.	56.1452	.05966	50.24	.00317
390.	55.2292	.05817	48.60	.00316
400.	54.3273	.05677	47.10	.00315
410.	53.4402	.05544	45.72	.00314
420.	52.5684	.05419	44.45	.00314
430.	51.7126	.05301	43.28	.00314
440.	50.8731	.05190	42.20	.00314
450.	50.0503	.05085	41.21	.00314
460.	49.2446	.04986	40.29	.00315
470.	48.4561	.04892	39.45	.00316
480.	47.6851	.04803	38.66	.00317
490.	46.9315	.04719	37.94	.00318
500.	46.1955	.04639	37.26	.00320
510.	45.4770	.04563	36.64	.00321
520.	44.7758	.04491	36.06	.00323
530.	44.0919	.04423	35.53	.00325
540.	43.4251	.04357	35.03	.00327

* Two Phase Boundary

Table 7. Transport Properties of Oxygen, Isobars, Engr. Units.

12000. psia Isobar					13000. psia Isobar				
Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h	Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h
* 113.963	84.3827	.12909	462.83	.00387					
115.	84.2544	.12866	455.02	.00387	* 115.227	84.5803	.13002	470.91	.00388
120.	83.6482	.12670	419.76	.00389	120.	84.0076	.12817	435.59	.00390
125.	83.0581	.12491	388.07	.00390	125.	83.4248	.12641	402.37	.00392
130.	82.4801	.12324	359.53	.00390	130.	82.8553	.12477	372.53	.00393
135.	81.9115	.12167	333.77	.00391	135.	82.2962	.12323	345.67	.00394
140.	81.3504	.12016	310.49	.00391	140.	81.7453	.12176	321.43	.00395
145.	80.7953	.11872	289.43	.00392	145.	81.2010	.12035	299.53	.00395
150.	80.2451	.11731	270.35	.00392	150.	80.6622	.11898	279.72	.00396
155.	79.6991	.11592	253.04	.00392	155.	80.1280	.11764	261.75	.00396
160.	79.1566	.11456	237.32	.00391	160.	79.5977	.11632	245.45	.00396
165.	78.6172	.11320	223.00	.00391	165.	79.0708	.11500	230.61	.00396
170.	78.0806	.11185	209.96	.00390	170.	78.5470	.11369	217.10	.00396
175.	77.5464	.11050	198.05	.00390	175.	78.0260	.11239	204.78	.00395
180.	77.0146	.10915	187.16	.00389	180.	77.5075	.11108	193.51	.00395
185.	76.4849	.10780	177.19	.00388	185.	76.9914	.10977	183.20	.00394
190.	75.9573	.10645	168.04	.00387	190.	76.4776	.10845	173.74	.00393
195.	75.4317	.10508	159.64	.00386	195.	75.9660	.10712	165.05	.00392
200.	74.9080	.10372	151.90	.00385	200.	75.4565	.10580	157.05	.00391
205.	74.3862	.10235	144.77	.00384	205.	74.9491	.10446	149.68	.00390
210.	73.8663	.10098	138.18	.00382	210.	74.4438	.10313	142.87	.00389
215.	73.3483	.09961	132.09	.00381	215.	73.9405	.10179	136.58	.00388
220.	72.8321	.09824	126.44	.00379	220.	73.4392	.10045	130.75	.00386
225.	72.3177	.09687	121.21	.00378	225.	72.9399	.09911	125.35	.00385
230.	71.8052	.09550	116.34	.00376	230.	72.4426	.09777	120.32	.00383
235.	71.2946	.09414	111.81	.00374	235.	71.9474	.09643	115.65	.00382
240.	70.7858	.09279	107.60	.00372	240.	71.4542	.09511	111.30	.00380
245.	70.2789	.09144	103.66	.00371	245.	70.9630	.09379	107.24	.00378
250.	69.7739	.09011	99.98	.00369	250.	70.4739	.09247	103.44	.00377
255.	69.2707	.08878	96.54	.00367	255.	69.9868	.09117	99.89	.00375
260.	68.7695	.08748	93.31	.00365	260.	69.5018	.08989	96.57	.00373
265.	68.2702	.08618	90.29	.00363	265.	69.0189	.08861	93.45	.00371
270.	67.7728	.08491	87.45	.00361	270.	68.5380	.08735	90.52	.00369
275.	67.2774	.08365	84.78	.00359	275.	68.0593	.08611	87.77	.00368
280.	66.7839	.08241	82.26	.00357	280.	67.5827	.08489	85.18	.00366
285.	66.2926	.08119	79.89	.00355	285.	67.1083	.08368	82.74	.00364
290.	65.8032	.07999	77.66	.00353	290.	66.6361	.08249	80.43	.00362
295.	65.3160	.07881	75.55	.00351	295.	66.1661	.08133	78.26	.00360
300.	64.8308	.07765	73.55	.00349	300.	65.6983	.08018	76.20	.00358
310.	63.8672	.07541	69.88	.00346	310.	64.7696	.07795	72.42	.00355
320.	62.9126	.07326	66.58	.00342	320.	63.8502	.07582	69.02	.00352
330.	61.9675	.07120	63.60	.00339	330.	62.9406	.07377	65.96	.00349
340.	61.0324	.06924	60.91	.00336	340.	62.0410	.07182	63.19	.00346
350.	60.1078	.06738	58.47	.00334	350.	61.1518	.06996	60.67	.00343
360.	59.1942	.06561	56.25	.00331	360.	60.2735	.06819	58.39	.00341
370.	58.2922	.06394	54.22	.00329	370.	59.4064	.06651	56.31	.00339
380.	57.4023	.06235	52.38	.00328	380.	58.5509	.06491	54.41	.00337
390.	56.5252	.06084	50.69	.00326	390.	57.7075	.06340	52.66	.00336
400.	55.6612	.05942	49.13	.00325	400.	56.8765	.06196	51.07	.00335
410.	54.8109	.05807	47.71	.00324	410.	56.0584	.06059	49.60	.00334
420.	53.9747	.05680	46.40	.00324	420.	55.2534	.05929	48.24	.00333
430.	53.1531	.05559	45.19	.00323	430.	54.4618	.05806	47.00	.00332
440.	52.3463	.05445	44.08	.00323	440.	53.6840	.05688	45.85	.00332
450.	51.5548	.05336	43.05	.00323	450.	52.9201	.05577	44.78	.00332
460.	50.7786	.05233	42.10	.00324	460.	52.1704	.05470	43.80	.00332
470.	50.0181	.05135	41.21	.00324	470.	51.4349	.05369	42.88	.00332
480.	49.2732	.05042	40.40	.00325	480.	50.7139	.05272	42.04	.00332
490.	48.5442	.04954	39.64	.00326	490.	50.0072	.05179	41.25	.00333
500.	47.8310	.04870	38.94	.00327	500.	49.3150	.05091	40.52	.00333
510.	47.1336	.04789	38.29	.00328	510.	48.6372	.05006	39.84	.00334
520.	46.4519	.04713	37.68	.00329	520.	47.9738	.04925	39.21	.00335
530.	45.7857	.04639	37.12	.00330	530.	47.3246	.04847	38.62	.00335
540.	45.1351	.04569	36.59	.00332	540.	46.6896	.04772	38.07	.00336

* Two Phase Boundary

Table 7. Transport Properties of Oxygen, Isobars, Engr. Units.

14000. psia Isobar					15000. psia Isobar				
Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h	Temp. R	Density lb/ft**3	Thermal Cond. BTU/ft.h.R	Viscosity micro- lb/ft.s	Thermal Diffusivity ft**2/h
* 116.480	84.7737	.13095	478.56	.00390	* 117.723	84.9630	.13188	485.78	.00392
120.	84.3568	.12962	451.58	.00392	120.	84.6967	.13104	467.73	.00393
125.	83.7806	.12787	416.78	.00394	125.	84.1263	.12931	431.30	.00396
130.	83.2188	.12626	385.61	.00396	130.	83.5716	.12773	398.76	.00398
135.	82.6684	.12476	357.61	.00397	135.	83.0291	.12625	369.60	.00400
140.	82.1269	.12333	332.39	.00398	140.	82.4963	.12485	343.38	.00401
145.	81.5927	.12195	309.64	.00399	145.	81.9714	.12351	319.75	.00402
150.	81.0644	.12062	289.07	.00400	150.	81.4529	.12222	298.42	.00403
155.	80.5412	.11932	270.45	.00400	155.	80.9398	.12095	279.12	.00404
160.	80.0222	.11803	253.55	.00400	160.	80.4314	.11971	261.63	.00404
165.	79.5070	.11676	238.19	.00400	165.	79.9270	.11847	245.74	.00405
170.	78.9951	.11549	224.21	.00400	170.	79.4262	.11724	231.28	.00405
175.	78.4862	.11422	211.46	.00400	175.	78.9287	.11601	218.10	.00405
180.	77.9801	.11295	199.81	.00400	180.	78.4341	.11477	206.07	.00405
185.	77.4766	.11167	189.15	.00399	185.	77.9423	.11353	195.06	.00405
190.	76.9755	.11039	179.38	.00399	190.	77.4531	.11229	184.97	.00404
195.	76.4768	.10911	170.40	.00398	195.	76.9663	.11104	175.70	.00404
200.	75.9804	.10781	162.14	.00397	200.	76.4820	.10977	167.18	.00403
205.	75.4863	.10651	154.53	.00396	205.	76.0001	.10851	159.33	.00402
210.	74.9943	.10521	147.51	.00395	210.	75.5205	.10723	152.08	.00401
215.	74.5045	.10390	141.01	.00394	215.	75.0431	.10595	145.39	.00400
220.	74.0168	.10259	135.00	.00393	220.	74.5680	.10467	139.18	.00399
225.	73.5313	.10128	129.42	.00392	225.	74.0951	.10339	133.43	.00398
230.	73.0479	.09997	124.24	.00390	230.	73.6245	.10210	128.10	.00397
235.	72.5667	.09866	119.42	.00389	235.	73.1561	.10082	123.13	.00396
240.	72.0876	.09735	114.93	.00387	240.	72.6899	.09953	118.50	.00394
245.	71.6107	.09606	110.74	.00386	245.	72.2260	.09826	114.19	.00393
250.	71.1359	.09477	106.83	.00384	250.	71.7643	.09699	110.16	.00391
255.	70.6633	.09349	103.17	.00382	255.	71.3049	.09573	106.39	.00390
260.	70.1929	.09222	99.75	.00381	260.	70.8477	.09447	102.86	.00388
265.	69.7247	.09096	96.53	.00379	265.	70.3928	.09323	99.55	.00387
270.	69.2586	.08972	93.52	.00377	270.	69.9401	.09201	96.45	.00385
275.	68.7948	.08849	90.68	.00376	275.	69.4898	.09079	93.53	.00383
280.	68.3333	.08728	88.01	.00374	280.	69.0418	.08959	90.78	.00382
285.	67.8740	.08608	85.50	.00372	285.	68.5960	.08841	88.19	.00380
290.	67.4169	.08491	83.13	.00370	290.	68.1527	.08725	85.75	.00378
295.	66.9622	.08375	80.89	.00369	295.	67.7116	.08610	83.45	.00377
300.	66.5098	.08262	78.77	.00367	300.	67.2729	.08497	81.27	.00375
310.	65.6119	.08041	74.88	.00364	310.	66.4027	.08277	77.27	.00372
320.	64.7237	.07828	71.38	.00361	320.	65.5422	.08066	73.67	.00369
330.	63.8452	.07625	68.23	.00358	330.	64.6915	.07863	70.43	.00366
340.	62.9768	.07430	65.38	.00355	340.	63.8508	.07669	67.50	.00364
350.	62.1188	.07244	62.79	.00353	350.	63.0203	.07483	64.84	.00361
360.	61.2714	.07067	60.44	.00350	360.	62.2003	.07305	62.42	.00359
370.	60.4349	.06898	58.30	.00348	370.	61.3910	.07136	60.22	.00357
380.	59.6096	.06737	56.35	.00346	380.	60.5925	.06974	58.21	.00355
390.	58.7959	.06584	54.55	.00345	390.	59.8051	.06820	56.36	.00353
400.	57.9939	.06439	52.91	.00343	400.	59.0290	.06673	54.67	.00352
410.	57.2041	.06300	51.40	.00342	410.	58.2645	.06532	53.12	.00351
420.	56.4267	.06168	50.00	.00341	420.	57.5116	.06398	51.68	.00350
430.	55.6618	.06042	48.72	.00341	430.	56.7707	.06270	50.36	.00349
440.	54.9098	.05922	47.53	.00340	440.	56.0417	.06147	49.14	.00348
450.	54.1707	.05807	46.43	.00340	450.	55.3249	.06030	48.00	.00347
460.	53.4447	.05698	45.41	.00339	460.	54.6204	.05917	46.95	.00347
470.	52.7319	.05593	44.47	.00339	470.	53.9281	.05809	45.98	.00346
480.	52.0324	.05492	43.59	.00339	480.	53.2483	.05705	45.07	.00346
490.	51.3462	.05396	42.78	.00339	490.	52.5808	.05604	44.23	.00346
500.	50.6733	.05303	42.02	.00340	500.	51.9257	.05508	43.45	.00346
510.	50.0137	.05214	41.31	.00340	510.	51.2830	.05415	42.71	.00346
520.	49.3674	.05129	40.65	.00340	520.	50.6526	.05325	42.03	.00346
530.	48.7342	.05046	40.04	.00341	530.	50.0344	.05239	41.40	.00346
540.	48.1140	.04967	39.47	.00341	540.	49.4283	.05155	40.80	.00346

* Two Phase Boundary

Appendix A. Program Listings for Viscosity

The listings are extracted from reference [7].

Note 1. A call to the coefficient subroutine, i.e. CALL DATA 02, must precede the use of these routines.
Note 2. Entry variables to FUNCTION VISC(DD,T) are density in mol/L and temperature in K.

```
      FUNCTION VISC(DD,T)
C     RETURNS VISCOSITY IN (G/CM-S)*E+6,
C     T IN K, D IN MOL/L
      COMMON/CRIT/EM
      D=DD*EM/1000.
      VISC=DILV(T)+FDCV(D,T)+EXCESV(D,T)
      RETURN
      END

      FUNCTION DILV(T)
C     GIVES DILUTE GAS VISCOSITY AND THERMAL
C     CONDUCTIVITY FOR AN INPUT TEMP. IN
C     KELVIN.  OUTPUT UNITS ARE SAME AS
C     THOSE IN VISC AND THERM
      COMMON/ISP/N,NW,NWW
      COMMON/DATA1/GV,GT,FV,FT,EV,ET
      DIMENSION GV(9),GT(9),FV(4),FT(4),EV(8),ET(8)
      SUM=0
      TF=T**(1./3.)
      TFF=T**(-4./3.)
      DO 10 I=1,9
      TFF=TFF*TF
   10 SUM=SUM+GV(I)*TFF
      IF(NWW.EQ.7) GO TO 9
      DILV=SUM*1000.
      GO TO 11
    9 DILV=SUM
   11 RETURN
      ENTRY DILT
      TF=T**(1./3.)
      TFF=T**(-4./3.)
      SUM=0
      DO 20 I=1,9
      TFF=TFF*TF
   20 SUM=SUM+GT(I)*TFF
      DILV=SUM
      RETURN
      END

      FUNCTION FDCV(D,T)
C     FIRST DENSITY CORRECTION
C     FOR VISCOSITY AND THERMAL CONDUCTIVITY
      COMMON/DATA1/GV,GT,FV,FT,EV,ET
      DIMENSION GV(9),GT(9),FV(4),FT(4),EV(8),ET(8)
      FDCV=(FV(1)+FV(2)*(FV(3)-ALOG(T/FV(4)))**2)*D
      RETURN
      ENTRY FDCT
      FDCV=(FT(1)+FT(2)*(ET(3)-ALOG(T/FT(4)))**2)*D
      RETURN
      END

      FUNCTION EXCESV(D,T)
C     CALCULATES EXCESS VISCOSITY
      COMMON/DATA1/GV,GT,FV,FT,EV,ET
      COMMON/ISP/N,NW
      DIMENSION GV(9),GT(9),FV(4),FT(4),EV(8),ET(8)
      R2=D**(.5)*((D-FV(8))/FV(8))
      R=D**(.1)
      X=EV(1)+EV(2)*R2+EV(3)*R+EV(4)*R2/(T*T)+EV(5)*R/T**(1.5)+EV(6)/T
     1+EV(7)*R2/T
      X1=FV(1)+EV(6)/T
      EXCESV=EXP (X)-EXP (X1)
      RETURN
      ENTRY EXCEST
C     CALCULATES EXCESS THERMAL CONDUCTIVITY
       IF(NW.EQ.0 ) GO TO 3
      R=D**(.1)
      X=ET(1)+ET(2)*R+ET(3)*R/T**(1.5)+ET(4)/T
      X1=ET(1)+ET(4)/T
      EXCESV=(EXP (X)-EXP (X1))/10.
      RETURN
    3 R2=D**(.5)*((D-FT(8))/ET(8))
      R=D**(.1)
      X=FT(1)+FT(2)*R2+ET(3)*R+ET(4)*R2/(T*T)+ET(5)*R/T**(1.5)+ET(6)/T
     1+ET(7)*R2/T
      X1=ET(1)+ET(6)/T
      EXCESV=EXP (X)-EXP (X1)
      RETURN
      END
```

Appendix B. Program Listings for Thermal Conductivity

The listings are extracted from references [7] and [8].

Note 1. A call to the coefficient subroutine, i.e. CALL DATA 02, must precede the use of these routines.
Note 2. Entry variables to FUNCTION THERM(DD,T) are density in mol/L and temperature in K.
Note 3. The dilute gas thermal conductivity, ENTRY DILT in FUNCTION DILV(T), is listed in Appendix A.

```
      FUNCTION THERM(DD,T)
C     RETURNS TC IN MW/M-K, T IN K, D IN MOL/L
      COMMON/HAN/CR,TCI
      COMMON/ISP/N,NW
      COMMON/CRIT/EM
      IF(EM.EQ.31.9988) GO TO 4
      D=DD*EM/1000.
      IF(NW.EQ.0 ) GO TO 3
      CR=0.0
      THER=DILT(T)+FDCT(D,T)*100.+EXCEST(D,T)+CR
      TCI=THER-CR
       THERM=THER
      RETURN
    3 CR=0.0
      THERM=DILT(T)+FDCT(D,T)+EXCEST(D,T)+CR
      TCI=THERM-CR
      RETURN
    4 CR=CRITCR(DD,T)*1000.
      TCI=THERMR(DD,T)*1000.
      THERM=TCI+CR
      RETURN
      END

      FUNCTION THERMR(RHO,TEMP)
C     4TH SURFACE, COEF. FROM TC021 AND MINIMS, 3 MAR 82
      DIMENSION B(10)
      DATA B/.298644E-5
     1,.59842E+00,.11362E-01,-.19520E-04
     2,.47624E+00,-.64769E-03,.83223E-06
     3,-.278141E-4,.153705E-6,.147176E+1/
      T=TEMP
      DEN=RHO
      TCZERO=DILT(T)/1000.
      AL=B(1)*T
      BE=B(2)+B(3)*T+B(4)*T**2
      GA=B(5)+B(6)*T+B(7)*T**2
      DE=B(8)+B(9)*T+B(10)/T**2
      THERMR=TCZERO+AL*DEN+DE*(EXP(BE*DEN**GA)-1.0)
      RETURN
      END

      FUNCTION CRITCR(RHO,TEMP)
C     4TH SURFACE, COEF. FROM TC021 AND MINIMS, 3 MAR 82
      DIMENSION C(7)
      DATA C/.219200E+0,-145.55,.734512E-02,-.282950E-04
     1,-.71599E-3,.13804E+0,.12980E-5/
      DATA (TC=154.581),(RHOC=13.63)
      T=TEMP
      DEN=RHO
      DELO=ABS(DEN-RHOC)/RHOC
      IF(T.LT.TC) T=TC+(TC-T)
      IF(T.LT.307.443) GO TO 4
      CRITCR=0.
      RETURN
    4 CONTINUE
      AMPL=C(1)/(T+C(2))+C(3)+C(4)*T
      DELT=T-TC
      RHOCENT=RHOC+C(5)*DELT**1.5
      DELRHO=DEN-RHOCENT
      X1=C(6)*DELRHO
      IF(DELRHO.LT.0.) X1=X1+C(7)*DELRHO**5
      CRITCR=AMPL*EXP(-X1**2)
      IF(T.GT.162.9805) RETURN
      IF(DEN.LT.7.5.OR.DEN.GT.18.) RETURN
      TEST1=SENG81(DEN,T)
      IF(TEST1.GT.CRITCR) CRITCR=TEST1
      RETURN
      END
```

```
      FUNCTION SENG81(RHO,TEMP)
C     SCALED EQUATION ONLY, VERSION OF 12 FEB 82
C     CRITICAL ENHANCEMENT AS IN SENGERS ET AL 1981 U MARYL. REPORT
C     UNITS, IN MOL/L,K, INTERNAL ALSO ATM, OUT W/M-K, ETA G/CM-S,BK J/K
C     1.D2 REPLACED BY 1.04, PARAMETER VARIATION FOR WEBER DATA
      DATA (TC=154.581),(DC=13.63),(BK=1.38054E-23),(PC=49.77054)
     1 ,(ZZ=5.9783E-10)
      DATA (E=0.287),(G=1.190),(B=0.355),(DD=2.36),(XZ=0.183),(DE=4.352)
      DEN=RHO
      T=TEMP
      DELD=ABS(DEN-DC)/DC
      DELT=ABS(T-TC)/TC
      DFACT=EXP(-(39.8*DELT**2+5.45*DELD**4))
      RSTAR=DEN/DC
      VIS=VISC(DEN,T)*(1.0E-06)
      CALL DPDT(DPT,DEN,T)
C     IF(DELD.LE.0.25.AND.DELT.LT.D.03) GO TO 8
C     CALL DPDD(DPD,DEN,T)
C     CHISTAR=PC*DEN/(DC**2*DPD)
C     GO TO 12
    8 IF(DELD.EQ.D.) GO TO 3
      X=DELT/DELD**(1.D/B)
      Y=(X+XZ)/XZ
      TOP=DELD**(-G/B)*((1.+E)/(1.+E*Y**(2.*B)))**((G-1.)/(2.*B))
      DIV=DD*(DE+(Y-1.)*(DE-1./B+E*Y**(2.*B))/(1.+E*Y**(2.*B)))
      CHISTAR=TOP/DIV
   12 CHI=CHISTAR**D.468D67
      UPPER=1.04*BK/PC*(T*DPT/RSTAR)**2*CHI*DFACT*1.D1325E+6
      SENG81=UPPER/(ZZ*6.*3.14159*VIS)
      RETURN
    3 BGAM=XZ**G/DD*((1.+E)/E)**((G-1.)/(2.*B))
      CHISTAR=BGAM*(DELT)**(-G)
      GO TO 12
      END
```

Appendix C. Conversion Factors, Oxygen

Temperature	1.8 R = 1 K
Pressure	14.695949 psia = 1 atm = 1.01325 x 10^5 N/m^2 ($1\ N/m^2 = 1$ Pa)
Specific Volume	0.0005005957 ft^3/lb_m = 1 cm^3/g mol
Internal Energy, Enthalpy	0.0134446 BTU/lb_m = 1 J/g mol
Entropy, Specific Heat	0.0074692 $BTU/lb_m R$ = 1 J/g mol-K
Thermal Conductivity	0.0578176 BTU/ft-hr-R = 1 mW/cm-K
Viscosity	0.067196897 lb_m/ft-s = 1 g/cm-s = 1 N s/m^2 = 1 Pa s
Speed of Sound	3.2808 ft/s = 1 m/s
Molecular Weight	31.9988
Surface Tension	0.5710147 x 10^{-5} lb_f/in = 1 dyn/cm (1 dyn = 10^{-5} N)

1. Report No.	2. Government Accession No.	3. Recipient's Catalog No.
NASA RP-1102		

4. Title and Subtitle	5. Report Date
TRANSPORT PROPERTIES OF OXYGEN	April 1983
	6. Performing Organization Code

7. Author(s)	8. Performing Organization Report No.
H. M. Roder	NBSIR 82-1672
	10. Work Unit No.

9. Performing Organization Name and Address	11. Contract or Grant No.
National Bureau of Standards Department of Commerce Washington, D. C. 20234	C-32369-C
	13. Type of Report and Period Covered
12. Sponsoring Agency Name and Address	Reference Publication
National Aeronautics and Space Administration Lewis Research Center Cleveland, Ohio 44135	14. Sponsoring Agency Code

15. Supplementary Notes

16. Abstract

This report presents tables of viscosity, thermal conductivity, and thermal diffusivity of oxygen as a function of temperature and pressure from the triple point to 320 K and at pressures to 100 MPa. Auxiliary tables in engineering units are also given. Viscosity and thermal conductivity are calculated from previously published correlations. Density and specific heat at constant pressure, required to calculate thermal diffusivity, are obtained from an equation of state. The Prandtl number can be obtained quite easily from the values tabulated.

17. Key Words (Suggested by Author(s))	18. Distribution Statement
Density; Oxygen; Pressure; Tables; Temperature; Thermal conductivity; Thermal diffusivity; Viscosity	STAR Category 34 Unclassified - unlimited

19. Security Classif. (of this report)	20. Security Classif. (of this page)	21. No. of Pages	22. Price*
Unclassified	Unclassified	87	A05

* For sale by the National Technical Information Service, Springfield, Virginia 22161

NASA-Langley, 1983

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